The National

Future Farmer

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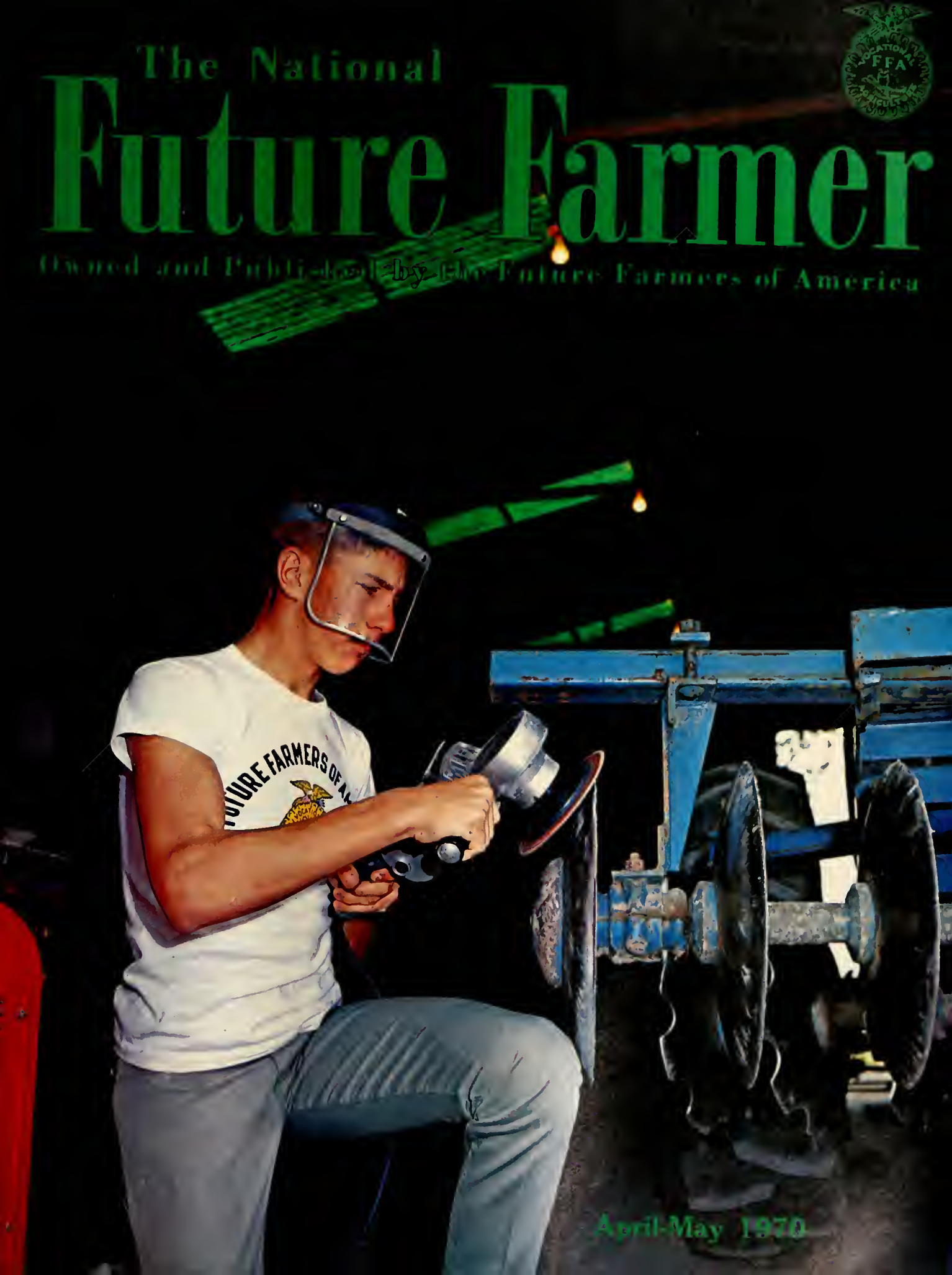
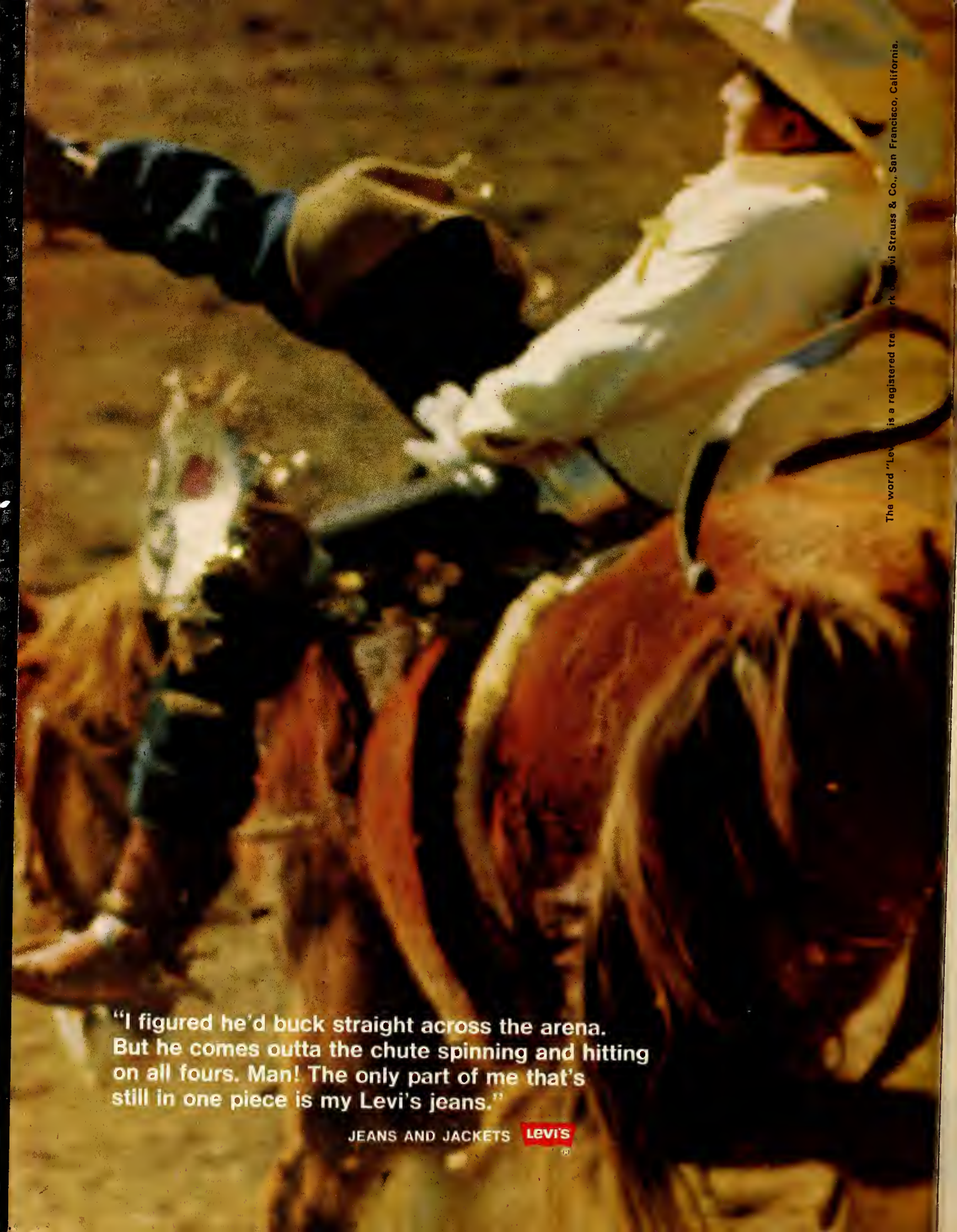


April-May 1970


"I figured he'd buck straight across the arena.
But he comes outta the chute spinning and hitting
on all fours. Man! The only part of me that's
still in one piece is my Levi's jeans."
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The National
Future Farmer

VOLUME 18 NUMBER 4 APRIL-MAY, 1970

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Agri-Emphasis: Crops

How Farm Products Move 18

Many fascinating things are happening in the area of transporting farm crops to market. This article provides some inside information on what the trucking, railroad, and airline industries are doing to speed up product distribution. Irrigation, tillage practices, and FFA members using new methods of producing field crops, forest crops, and ornamental plants are included in this exciting crop section.

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Impossible Dream 11

Although becoming a national officer seemed like an "impossible dream" to Dennis Pharris, he was elected as your National FFA Secretary. He did it by improving his speaking ability with hard work and building a good leadership base. His plans for preparing to stay in farming is another highlight of this national FFA leader's story.

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Our Cover

Efficient crop production doesn't just happen. Planning, preparing tillage equipment, regular maintenance, buying seeds, and the actual field work are all part of the game.

Keith Karnack, a member of the Elfrida, Arizona, FFA Chapter is shown on our cover sharpening a disc in the shop. His advisor is Mr. Pat English.

Photo by Guy Price

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Looking Ahead

Livestock

SCHOLARSHIP CONTEST—The scholarship committee of the American Angus Auxiliary announced that high school graduating seniors can now apply for its 1970 scholarship awards. The winning girl will serve as the American Angus Queen, and the boy winner will be her escort. Both winners will receive a $600 scholarship. Those interested must apply to their state or regional auxiliary before June 24 and can obtain this address by writing to Mrs. Argyle Skolas, National Chairman, Westby, Wisconsin 54667.

WHEY-BASED FOAM—University of Wisconsin food scientists have found that dried sweet or acid whey can be made into the multipurpose substance—polyurethane foam. Compared to conventional foams, whey-based foam has inherent self-extinguishing flammable properties and can be produced at a lower cost than other foam formulas. Sweet or acid whey, now a waste dairy product, can be used as a packaging material, for sound proofing, and as fire-extinguishers in its foamy state.

BEEF GRADING—More changes in beef grading standards can be expected in the near future according to an Iowa State University meat specialist. The present beef market now accepts about 5 percent as prime grade cattle, but within five years he predicts prime cattle to receive price discrimination because of excess fat and marbling. In accordance with his analysis, the American Meat Institute has already recommended that conformation be removed as a quality factor when grading carcasses.

Crops

300-BUSHEL CORN—By 1980, says Frank Remley, Cargill Seed's manager of research, corn yields will reach close to 300 bushels per acre. The increase over today's yields will be a result of heavier fertilizer applications, thicker plantings, earlier planting, and better moisture control. Application of 500 to 1,000 pounds of fertilizer and populations of 60,000 to 80,000 plants per acre will provide more moisture preserving shade from the crop itself. He also says planting in late April at temperatures of 50 degrees is not far off.

MERCURY SEED TREATMENT—The USDA has notified pesticide manufacturers that federal registration of seed treatments containing mercury products are suspended. Directions of proper use and caution labels have failed to prevent misuse of treated seed as livestock feed. Damage to both animals and man by mercury-treated seed through food and feed are irreversible, thus requiring the action to safeguard public health.

SCAB-RESISTANT APPLE—Agricultural experiment stations of Illinois, Purdue, and Rutgers Universities announced the introduction of the nation's first scab-resistant apple at the Illinois State Horticultural Society. The apple's name is Prima and is now available to qualified nurseries. The red dessert apple is a giant step toward reducing the number of fungicides used today in producing high quality fruit.

Land

RESOURCE RENTAL—A recent survey by the USDA showed that farms expanding in size increased acreage by renting two acres of land for every acre purchased. Likewise, on farms decreasing in size, nine acres of land was given up for rental for each acre sold. This means that land rental will play a major role in the continuing process of farm expansion and account for a higher turnover of resource control.

ENVIRONMENT IMPROVEMENT—The students with a degree in agriculture will be "drafted" in the '70's to help improve our environment and prevent pollution, in addition to producing food, says Director of Resident Instruction B. R. Bertramson of Washington State University. Agricultural graduates will be involved more than ever in land zoning, land planning, control of erosion, protection of the water supply, feedlot runoff, and useful recreation. Considering these needs, he says agriculture graduates can be the major force in winning the battle for a satisfactory environment.

Management

INCOME TAX—Low down payment transfers of farm property can result in income tax advantages to the seller according to University of Missouri agricultural economists. They state that the trend of farm property sales seems to be away from traditional purchase agreements toward low down payments and long payout periods. Title transactions of this type are called "low equity transfers."

FINANCIAL STATEMENT—The nation's agricultural financial statement shows assets of $298 billion. Including estate, livestock, and bank deposits the assets were worth $14.6 billion more than a year earlier—a 5.2 percent increase which is about par with recent years. Farm liabilities totaled $51.9 billion—up $2.9 billion from a year ago, showing the smallest increase since 1960.

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Edgar Killebrew, Jr. Abbeyville, Alabama

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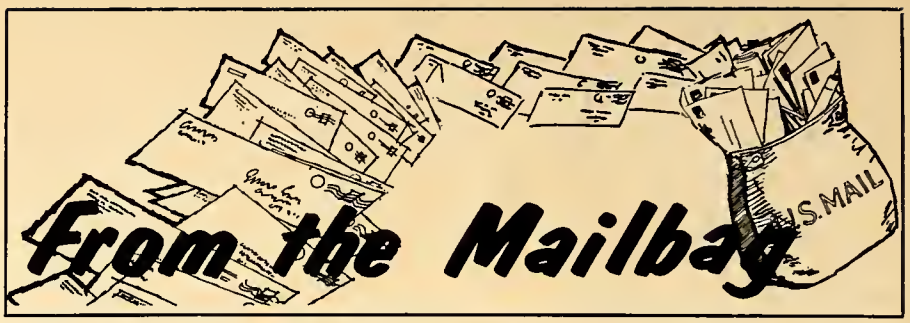

Columbus, Montana

As a Future Farmer I have been thinking ahead to the fiftieth anniversary of the FFA. After attending the convention in 1968 and watching the Rose Bowl Parade every year on television, I couldn't help but think how inspirational it would be if the FFA sponsored an anniversary float led by the National FFA Band in the 1978 Rose Bowl Parade.

How would this dream be accomplished? If each chapter of the approximate 10,000 FFA chapters in the United States would allocate $1.00 (one dollar) a year to the National FFA Treasury for this purpose starting this year, the financing of the float would be realized by 1978.

The decision will be entirely up to the National FFA Organization, but planning should begin now if the project is to be fulfilled.

Dave Patterson

Dry Ridge, Kentucky

I was wondering when you are going to write an article in one of the magazines about the problem of pollution in the United States and how it effects the farmers across the land.

Roger Martin

Winston-Salem, North Carolina

I wonder if the editorial staff, and speaking instructors, along with FFA public speaking contestants in general are aware of possibilities of association with a Toastmasters Club, affiliated with Toastmasters International? After having public speaking in school, I have never found anything, anywhere, that compares favorably with the variety of good, practical experience and group evaluations that are involved in "toastmastering."

Toastmasters Clubs are primarily educational and will enable any person interested in self-improvement, to start where "he is," and improve himself.

L. H. Kimmons, Charter Member
Northwestern Toastmasters

Blacksburg, Virginia

I have recently reviewed a copy of AgriOPPORTUNITIES and congratulate you on a very fine publication. But even as good as the material is, I find an area of opportunity that is not treated in light of the potential that it truly does hold for young men and women. Agricultural engineering is a full fledged member of the industry of agriculture, and I urge you to place it in the proper prospective.

Two of my upcoming seniors, B.S. graduates in June of 1970, have been offered $10,300 and $10,500 as starting salaries. Salaries vary over a range, and these are on the high end, but in general, salaries are above many other areas in agriculture.

J. Philip Mason, Jr., Head
Agricultural Engineering Department
Virginia Polytechnic Institute

Sandwich, Illinois

As an ardent Angus enthusiast, we here in Illinois are not going to let Indiana receive credit for our Bill Weir (i.e. page 24, February-March, 1970) who showed an Angus steer to the Grand Champion spot in the Junior Show—International Livestock Exposition, November, 1969. Must be Union of Biggsville FFA as his address is Gladstone, Illinois, where his parents and grandparents live and have their Angus.

Mrs. R. L. Scheidecker

West Lafayette, Indiana

Although my term as Indiana State President ended in June, I am still a member of the FFA through the Purdue Collegiate FFA Chapter. I find myself frequently recalling the memories, the exeriences and challenges of being a state officer, and especially the friendships I made.

Probably most people associate "investment" with material objects, but sometimes investments can be in the form of ideas, judgements, or sound adventures. I like to consider my six years as a member of the Future Farmers as an investment in my life.

If more FFA members would take the time to become involved, to set a goal of determination and desire to do their best, then they would realize quite a return from their investment.

Steve Linvill
1968-69 Indiana State President

Steve was honored along with eight other FFA'ers by the American Academy of Achievement. See Word With The Editor, August-September, 1969.—Ed.

Pullman, Washingon

I'm especially grateful for the excellent treatment of the opportunities for young people who are trained in agriculture in AgriOPPORTUNITIES. Part of our responsibilities in directing the teaching in the College of Agriculture is to convey to young people the opportunities for those who have prepared for them.

Furthermore, you have provided some education for many of us on the extent and nature of the training which vocational agriculture in high schools provide.

B. R. Bertramson, Director
Resident Instruction
Washington State University

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A Lesson In Feeding

This chapter's cattle feeding program benefits area farmers.

Local people take much interest in reweighing the cattle at the show while Advisor George Provence, right of the chute, records weights.

HOW would you feed three head of cattle so they make the most gain at the lowest cost—and the biggest profit?

This was the problem presented to the Future Farmers of Alex, Oklahoma, in the fall of 1959. It was agreed that a commercial feeding program be established by the Alex FFA Chapter and that it fit into the regular "show steer" feeding program.

Alex is a small agricultural town of 550 people, located in the Washita River Valley where an abundance of alfalfa, milo, and small grains are grown in conjunction with beef cow herds. Most farmers market their calves in the fall and the calves are taken to wheat pasture for a warm-up period before going into Corn Belt feedlots. A few Alex farmers purchase stocker calves for utilizing wheat pasture and a few practice winter feeding of small numbers of cattle.

Each contestant must post the feeding data on his calves at the show. Here Vaughn Craddock completes his chart.

These purposes, plus the fact that a lot of farmers disagreed about feeding practices, was the basis for beginning Alex FFA Chapter's feeding experiment. The rules of the commercial feeding program are: 1.) Any size of cattle may be fed. 2.) Any sex or combination of sexes may be used. 3.) Any breed, crossbreds, or mixture of breeds may be fed. 4.) Straight wheat pasture may be utilized provided $3.00 per month per head is charged. 5.) Feed cost and quantity must be recorded.

The winners are determined by a point system. Each pound of gain equals one point. The feed cost per pound of gain is multiplied by 10 and subtracted from a constant of 150. This answer is then added to pounds of gain to determine the total points.

For example, if it cost 13.5 cents to put on a pound of gain, the pen would get 15 points added to their gain. If the cost per pound of gain was 19 cents, the pen would have a minus 40 points added to the total gain.

The normal feeding period is about 100 days. During the first week in November the extension livestock specialist brings portable scales to each member's home and the steers are weighed. At the conclusion of the feeding period —always during the local livestock show, usually the last week of February—the calves are reweighed and the winners determined. Local people have set up sizeable cash prizes for the member who does the best feeding job.

Last year five members fed cattle in the commercial feeding program. Vaughn Craddock's winning three head consisted of two Brahman crosses and one black whiteface. They cost $372.40 and were fed a ration of 70 percent maize and 30 percent cottonseed hulls and meal and 44 bales of alfalfa. Feed cost totaled $120.08. The pen sold for $615 giving him a net profit of $122.42. His feed cost per pound of gain was 17.5 cents. The lowest profit by a member was $74.50.

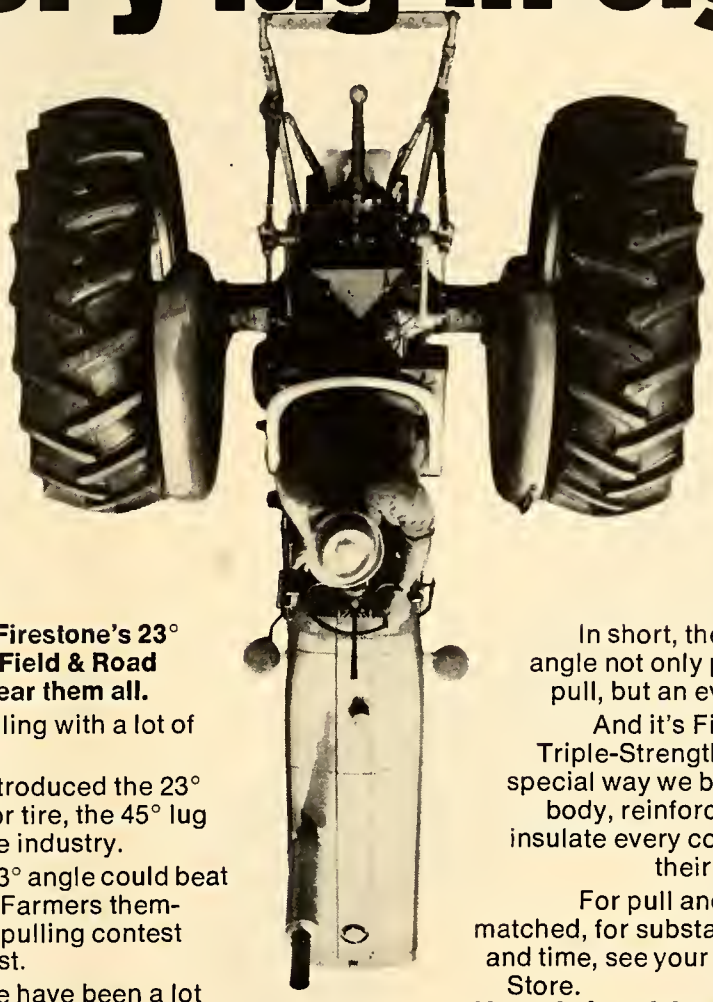
The Alex chapter has the same program for swine but with one additional rule. That is, pigs cannot weigh more than 75 pounds at the initial weighing.

Doug Pearson made the highest profit from his three crossbred pigs. His feed cost was 9 cents per pound of gain, feeding wheat and milo. He purchased the pigs for $39.00, had expenses of $82.27, and made a profit of $46.96. One hog had a total gain of 183 pounds in 95 days. The net profits of other members ranged from this high to a loss of 44 cents, with most hog profits hovering around $30.00.

The week following the local show FFA members load their livestock on trucks and take them to the stockyards in Oklahoma City. They watch the commission men sell the cattle and then they tour the packing plant.

"The commercial feeding program," says George Provence, advisor of Alex FFA, "makes members see how important market price, feeds and their costs, and management are. In this way they find out that what generally is considered the right feed might not always be so."

We just licked every lug in sight



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A Word With the Editor

BOTH FFA and vocational agriculture have been criticised for not keeping pace with changes taking place in education and agriculture. While just criticism is welcomed, criticism based on general assumptions which are either untrue, or themselves 20 to 30 years out of date is not helpful.

Do these critics really know what FFA is like today? Have they taken time to find out what is being taught in the vo-ag department at the local high school?

Just as every chain has its weakest link, so are there weak FFA chapters and vo-ag departments that need to be improved. But some are as modern as tomorrow and others are getting that way. It would appear that some of the critics are basing their assumptions on "... how it was when I was in high school,"—and it is just not that way any more. Tell them when you have a chance.

Still in Agriculture

A study of the 39 state presidents during the first 40 years of FFA existence in West Virginia was made by former State Advisor W. H. Wayman. He found that:

Six are full-time farmers, nine are engaged in part-time farm work, and 13 have agricultural jobs off the farm, including three vocational agriculture teachers.

One is presently the state agricultural commissioner, Gus R. Douglas, who served as president of the national FFA organization in 1946-47.

Among other highly successful former state presidents are two who have earned their doctors degree. Seventeen have earned bachelor degrees and five are still college students.

Where are your former state and chapter officers? These make good stories for the local press.

Awards Studied

FFA's Proficiency Awards Program recently got a close examination by six consultant committees who were asked to evaluate and make recommendations for modernizing the program. The industry of agriculture was well represented on these committees which also included local FFA advisors and state FFA executive secretaries. Their recommendations will help FFA keep its awards program in touch with the times. And you, the FFA member, will benefit.

Wilson Carnes
Editor

This bull is a sample of the quality of cattle that Dennis raises.

Posing with Dennis is his purebred Border Collie.

Dennis served as guest speaker on many occasions.

IMPOSSIBLE DREAM

"WHY not have an enterprise and be ready for FFA before I join?" This is what Dennis Pharris, this year's National FFA Secretary, thought as a seventh grader when his grandfather bought him a registered beef cow.

So began his plan and after enrolling in vo-ag he continued to enlarge his cattle herd. He borrowed occasionally from his father for operational costs, reinvested his profits, raised all of his heifer calves, and inherited some land from his grandfather.

Dennis now owns 43 head of registered Polled Hereford cows, calves, and heifers. He shows them at almost all major shows in Texas and says, "Usually I win a few and lose a few, but my prime goal is to increase my production program." However, don't overlook the quality of his cattle. Dennis' winnings include a champion Polled Hereford heifer at the Houston Livestock Show and several champions at other fairs.

His interest in cattle is further demonstrated by the fact that he competed on seven livestock judging teams in 15 different contests. He belongs to local, state, and national breed associations.

Based largely on his work with cattle, Dennis won the Star Chapter Farmer, Area Lone Star Farmer, and Star State Farmer awards. Outside of FFA he received the State Fair of Texas Honor award and the Texas and Southwestern Cattle Raisers Association award. His advisors are Mr. Billy Sullins and Mr. W. B. Shepard.

The young cattleman is co-owner with his father of a 700-acre farm-ranch operation located near Hillsboro in the central part of Texas. In addition to the Pharris Hereford Farms, they own the Pharris Cattle and Feed Company.

Although the partners work together on both enterprises, Dennis' father supervises their 500-acre, row-crop farming operation consisting of cotton, milo, and corn. Dennis, on the other hand, manages the feed and commercial cattle business. He buys bred cows, pastures them on rented land, and sells the cows and calves within an eight-month-cycle. The feed business involves distributing a complete line of feed to cattlemen.

But leadership is what earned Dennis the opportunity of serving as National Secretary. He was elected as chapter vice president and later district secretary and president. He also attended the National FFA Convention as a delegate.

"Public speaking came to my attention about that time," says Dennis, "but I didn't prove to be very outstanding in this area." Yet he was determined to meet the challenges by improving his ability. He participated in contests, worked as chairman on many committees, spoke at dinner programs, and performed as a disc jockey for a local radio station.

In high school Dennis held office in the band and student council and later became president of the Interact Rotary Club. After graduation, while serving as president of the Texas Junior Polled Hereford Association, he was elected as first state vice president of the Texas FFA Association.

In 1969 this leader was chosen as runner-up to the Outstanding Young Texan of the Year and finally attained his "impossible dream" by being elected to a national office. Next year Dennis will return as a Sophomore to Hill Junior College to continue studying agricultural economics.

"FFA and vocational agriculture," he observes, "have not just been a school activity which I will have to relinquish upon conclusion of my term as secretary. They have been an important part of my life and have provided many rewarding assets."

He plans to make farming his career.

Less Tillage Paying Off

How well are the new tillage practices proving out? ***By Ron Miller***

NEW technology has contributed greatly to the use of minimum and no-tillage production practices. Effective planters, new chemicals, and disease-resistant seeds are the main factors for their success. But how much success? Here are some results of the last few years that can help you decide whether to adopt or continue either practice.

No-Tillage. More farmers are adopting no-tillage farming now that statistics and favorable results are being reported. The Kentucky Crop Reporting Service estimates that over 100,000 acres of no-till row-crops will be planted in their state this year. In Virginia between 30,000 and 40,000 acres alone of corn will be grown with the no-till method.

But what kind of yields are farmers getting with no-tillage? In Ohio, wheat yields have been as good or better than those grown with conventional methods over the past two years. From 1962-68 Virgina farmers have increased corn production by an average of 16 bushels per acre with no-tillage over regular tillage.

In Kentucky, corn, soybean, and sorghum yields with no-tillage are comparable with results from conventional tillage in normal years. However, in dry years no-tillage yields are higher. Mulch crops like wheat, barley, oats, orchardgrass, fescue, birdsfoot trefoil, and especially rye have help increase moisture retention of the soil.

Since conservation of soil and water is improved with no-tillage, row-crops can now be grown on rolling land where it was not previously possible. In addition, because fewer machine operations are necessary, earlier and prompt planting of up to 1,000 acres allow farmers in Missouri and other Midwestern states to grow two crops on land where only one was previously produced. In many cases the no-till method cost $6 to $8 less per acre than the plow-disc-harrow sequence.

Weed control is generally easier with no-tillage. Contact herbicides—paraquat and atrazine—have proven successful in killing old plant growth without affecting newly sown crops. Later, residual herbicides keep weeds under satisfactory control.

Pest control, on the other hand, becomes harder since no-tillage encourages insect reproduction. To combat them insecticide is layed in along with seed and fertilizer with the fluted coulter of no-till planters. In conjunction with planting, researchers at Virginia Tech and the University of Guelph, Ontario, recommend increasing seeding rates to offset insect and bird losses and lower germination.

Applications of fertilizer and lime on no-till land require care. Tests by Virginia Tech agronomists reveal that the pH of soils under normal tillage vary little throughout plow depth while the pH of no-till soils are lower near the surface than at lower depths. Reports from Ohio State, likewise, caution against the use of too much nitrogen. Testing fertility every two years instead of four and smaller and more frequent applications of lime have helped farmers reduce these problems. No-tillage, however, improves soil texture and structure considerably.

Minimum Tillage. Where minimum tillage has been practiced results are about the same as with no-tillage. A survey by the Soybean Crop Improvement Council indicates that around 20 percent of the nation's top soybean producers went to some form of minimum tillage last year. The main reasons were less labor and lower production costs.

Agricultural engineers at Iowa State report average yields of 132 bushels of corn per acre with plowing and 125 bushels per acre with minimum tillage. In another part of the state, corn yields showed only a 3-bushel advantage for plowed ground over minimum tilled land. But when returns over costs were considered there was no advantage for plowing.

Plant pathologists say minimum tillage contributes to the carry over of plant residues which harbor disease organisms. High seeding rates used with minimum tillage also tend to intensify disease problems. Conversely, conventional tillage helps break down residues and at the same time destroys bacteria and fungi that cause disease.

However, the added ground cover with minimum tillage hastens the rise of soil temperatures and lets farmers plant earlier. That's why farmers in the Corn Belt using minimum tillage can plant three to four days ahead of users of conventional methods. In addition, cover refuge decreases the risk of wind and water erosion and diseases are easier to control with modern chemicals.

Conclusion. All in all no-tillage and minimum tillage have proven out well. More and more farmers will continue to adopt them as ways of crop production. Why? They offer high yields at lower costs.

Minimum tillage operations have helped farmers to get their crops in early.

Lundell Manufacturing Photo

GM

MARK OF EXCELLENCE

All week long, Wayne Daniel works out fuel problems on the internal combustion engine.

When he has his feet on the ground, amateur mountain climber Wayne Daniel spends his time answering one important question at the GM Tech Center Research Laboratories in Warren, Michigan: "How do traces of fuel escape combustion in automobile engines?"

Although there aren't any simple solutions, Wayne and other scientists like him have been making an increasing amount of progress. In fact, the 1970 models emit only one-third as much unburned hydrocarbon and carbon monoxide as the uncontrolled cars of 1960. And further reductions are on the way.

Meanwhile, some of Wayne's friends have been working on a mini-electric car that could be used for short trips in the suburbs. And on similar small commuter vehicles featuring gasoline or hybrid gasoline-electric power plants.

The point is, there are a lot of interesting people like Wayne holding down equally responsible jobs, helping prepare for future transportation needs.

General Motors

Interesting people doing interesting things.

He Makes Cash Cropping Pay

This young farmer made some changes that really boosted his crop yields.

Changes in Keith's corn growing program are responsible for increasing his yields to 125 bushels of shell corn.

BY planting in narrow rows and using some minimum tillage practices Keith Eisenmann raised his net income from corn by $25 per acre. He applies 300 pounds of fertilizer per acre for a plant population of 23,000 per acre. When his crop reaches five inches in height, he sprays for weeds thus eliminating all but one cultivation.

Another significant change in his corn program in recent years has been the added practice of plowing down anhydrous ammonia. He uses a rate of 200 pounds of actual nitrogen per acre and feels that it helps plants have more resistance to wet weather. Keith recalls that a couple of seasons ago one field was completely under water for two days and still produced 128 bushels of shell corn per acre.

Keith prepares his soybean land with a disc, spring-tooth, and drag sequence after plowing and again before planting. He plants at a rate of 1.5 bushels per acre (a spacing of one inch) in 30-inch rows and applies 200 pounds of fertilizer per acre. Immediately following planting he sprays a 12-inch band of herbicide over the rows.

When the beans are three inches tall Keith kills the weeds between the rows with a rotary hoe. He cultivates when they reach six inches in height and, if necessary, again in two or three weeks. "With good weed control and narrow rows I have increased my average soybean yields from 30 to 40 bushels per acre," says the Blissfield, Michigan, cash cropper. "At the same time my labor and machinery costs have decreased."

After harvest Keith delivers the soybeans to a local elevator for storage or direct sale—depending on the price. He markets corn in the same manner, although he has room to store some corn on the farm. In total he raises 100 acres of corn, 60 acres of soybeans, and some wheat and oats.

The young cash cropper began farming by renting 35 acres from an uncle for one-third of the profit. Since that time he has increased his rented land to 75 acres and bought a 126-acre farm.

Keith helps his father with the field work on a 390-acre operation and the annual production of 270 head of beef. In exchange for his labor he obtains the use of his father's machinery on the 126-acre place. Also, since the buildings on Keith's farm are not good enough for housing cattle, some equipment is stored in them. He pays one-third of the profit from the rented land to his uncle and another third to his father for the use of the machinery on this land.

The crop farmer's superior production has not gone unnoticed. He has won the National FFA Crop Proficiency award and the Blissfield Chapter corn and crop efficiency awards. He also worked as chairman of the land committee and participated on the chapter's farm forum team.

At the present time Keith is studying agriculture at Michigan State University with plans of entering into a partnership with his father after graduation. Because he has no cattle Keith continues to operate his land by putting as much as possible in the government program and by working on weekends in the spring and fall.

These beans averaged 45 bushels per acre after almost being drowned in the spring.

Low Volume Spraying

Can save time and provide good protection against plant disease.

Chevron Chemical Photo

UNIFORM chemical application is more crucial in plant disease control than in insect control. Plant disease spores land almost anywhere on the plant and can cause crop damage if infection starts on an unprotected spot.

On the other hand, insect pests move around on the plant and are likely to come in contact with the insecticide as they feed on plant foliage. Thus, you can usually get by with less evenly distributed spray for insect control. This is not the case when spraying for crop disease control which requires a higher degree of uniformity of application.

In high volume or high gallonage spraying, you use a greater volume of spray material—anywhere from 100 to 250 gallons per acre. Low volume spraying utilizes the same amount of active chemicals, but the water added is considerably less—between 5 to 60 gallons per acre. Therefore, in low volume applications where the spray is quite concentrated (5-15 gallons per acre), the effectiveness of the application depends greatly upon the redistribution of the chemical deposits on plant foliage by rainfall, irrigation, and dew.

Advantages

Why then use low volume instead of high volume sprays?

With the right weather conditions and properly adjusted equipment, low volume spraying allows for uniform distribution of the fungicide on plant foliage. And at the same time low volume spraying can amount to smaller total spraying costs for the season.

You need less water when using low volume sprays. This means you can spray more acres with each tank of spray. Consequently, you'll need less refills and save time and labor. Less time to spray more acres makes low volume spraying a good method to stop early disease infection.

Furthermore, light rains or showers following low volume spraying does not reduce the protective effect of the fungicide—they aid it somewhat.

Disadvantages

Since you're using less water and finer droplets with low volume spraying, there's the possibility of more hazard from spray drift. With greater risks involved, spray operations should be carried out more carefully to obtain satisfactory results.

Near ideal conditions of air movement, temperature, and humidity have to be met to get the best results from low volume sprays. When evaporation or drift is too high, a considerable amount of the chemical may be dissipated into the atmosphere rather than landing on the plants. Therefore, low volume sprays have a greater chance of failure when unfavorable weather conditions prevail at the time applications are made.

The use of extremely small droplets in low volume sprays presents a number of problems. For example, in an eight mile an hour wind, a 50 micron (A micron is 1/1000 of a millimeter.) droplet drifts over 450 feet while falling from a height of ten feet. Furthermore, when droplets are exceedingly small, the water in the spray may evaporate before actually settling on the plants. Hence, for most low volume spray operations, average droplet size should not be less than 100 microns.

Tips on Use

Several suggestions for improving the application of low volume sprays have been offered by Earl K. Wade, plant disease specialist at the University of Wisconsin.

When using a hydraulic boom-equipped field sprayer, it's best not to go lower than 40 gallons per acre. Nozzles with a hollow cone spray pattern and spray pressures between 100-400 pounds per square inch are preferable.

If made of brass or other soft metal, the nozzle whirler plate (cores) and aperture discs can wear out rapidly from the abrasive action of wettable powders. To prevent this and to maintain proper calibration, it's important that the cores and aperture discs are made of highly wear-resistant tungsten carbide or ceramic material. Even nozzles so equipped should be checked for wear at regular intervals.

Use low volume equipment only for low volume spraying. Never attempt to use standard high volume spray nozzles for low volume spraying by changing the nozzle discs. This can result in nozzle-clogging and a poor spray pattern.

Air blast sprayers work well for low volume spraying, but beware of the wind. Don't attempt to use an air blast sprayer if the wind is blowing more than eight miles per hour. Also, avoid trying to cover too wide a swath as spray should overlap at least 30 percent between swaths.

Fixed wing aircraft can use either boom-nozzle equipment or Micronair rotary atomizer units and normally operate at 80 to 95 miles per hour when spraying fungicides. Helicopters use boom-nozzle equipment exclusively and should not travel faster than 45 miles per hour while applying fungicides.

However, don't use aircraft if the wind is over 10 miles per hour, or the temperature exceeds 85 degrees F. Avoid spraying during the heat of the day when rising thermal air currents are likely to occur.

Regardless of the type of equipment you use, thorough mixing is very important with concentrated sprays. Provisions must be made for agitation in the tank while spraying. Premixing is also a good policy—especially when using wettable powders and aerial spraying.

With proper care, low volume spraying can provide low-cost protection against plant pests and plant disease.

Trees. Trees. Trees.

A crop that demands big management decisions and hard work from this young forester.

By Jack Pitzer

HE plants them, feeds them, protects them from fire and insects, and cleans away underbrush. Then he cuts 'em down and sells 'em.

Arthur Batchelor from Reform, Alabama, has a crop of trees. He owns one-third of 1,026 acres—896 acres is timberland. Another 30 acres is used for row crops and 100 acres is for permanent pasture. He owns some equipment but is in partnership with his father and brother for the land and the remaining equipment.

It takes some special equipment tc handle Arthur's tree crop and he has everything from a log skidder to three trucks and three chain saws. The tree planter, however, is his basic implement. Arthur says it has to be adjusted correctly for planting seedlings so the tap roots of seedlings are not bent and the soil is placed around them properly. Otherwise, chances of survival are slim. Another special machine is a log loader that hoists pulpwood onto trucks and a 40-foot, double-deck log trailer.

Over 100,000 seedlings have been planted on the farm and Arthur is planning to put out 100,000 slash and loblolly pines. He gets about 90 percent liveability on his seedlings.

Firebreaks around a new stand of timber are important. Arthur has constructed 21 miles of firebreak that also serve as a fire road in emergencies.

During four years of FFA Arthur has made money from the farm in several ways. In partnership he sold pine logs, hardwood logs, pulpwood, pine poles, and hay. He also did custom work with the crawler.

There are several projects Arthur has undertaken to keep his crop growing. Hardwood control has been applied to 46 acres. The young forester has control burned about 410 acres of timberland and has had 95 percent effectiveness with summer burns and 45 percent with winter burns. He gets 100 percent success with applications of 2, 4, 5-T on hardwood stumps. He has thinned 145 acres and selectively cut another 185 acres.

To check results from fertilization. Arthur had applied ammonium nitrate to a five- and six-year-old pine stand to see if it is profitable for his farm. The FFA'er is also interested in wildlife conservation. He left 90 acres for game cover and planted food for wildlife, too.

Arthur kept plenty busy with school activities—four years of football, class offices, and student council. He was a Sunday school teacher, a volunteer fire fighter, and worked on the Cerebral Palsy drive in his community.

In FFA, Arthur served as chapter president during his senior year and received the State Farmer degree. He served three years on the chapter's Greenhand committee. His advisor is Mr. Billy White.

Because of his successful achievements with timberland, Arthur was named national winner of the FFA Forestry Proficiency award and won several other forestry honors. He is studying science at Livingston University in Livingston, Alabama.

These signs are along the highway and were made of old circular saw blades.

Arthur can operate all of the equipment on the place and takes care of minor repairs and the regular maintenance.

When hardwood is cut from an area, Arthur uses 2, 4, 5-T around stumps to prevent other hardwoods from sprouting.

Norman is planning his future around ornamental horticulture.

Plants Add Up

He made ornamental plants his business. ***By Ron Miller***

NORMAN Freel of Lake Wales, Florida, exploits almost every possible means for increasing his ornamental plant business.

The young horticulturist has developed his business to the point that he now sells plants to local chain stores on a 75 percent consignment basis. Moreover, he produces Rex Begonias and other special orders under contract for the nursery where he works. He also landscaped his parents' Palm Knoll Motel, propagated over 3,000 hibiscus plants for the city of Lake Wales at no cost, and uses a small display stand to sell additional plants at the family motel.

His future plans include the construction of his own greenhouse and enlarging his plant and machinery inventory. In conjunction with his ornamental plant business, Norman is presently establishing a lawn and landscaping operation. He rents most of the equipment and has already completed work on five lawns, thus providing him with another outlet for plants. The agribusinessman started by producing 750 plants a year but now raises over 2,000 annually.

Norman became interested in plants when his father retired from military service and purchased the small motel near Lake Wales. Norman made cuttings from geraniums and soon had several flower beds growing around the property. "At first I was 'begging and borrowing' cuttings off every unusual plant from any available source. After a while my plant inventory included crotons, podocarpus, poinsettias, and hibiscus. But my prize plant was an expensive hybrid croton given to me as a Christmas present by my parents."

When Norman entered vo-ag he liked to work with citrus and ornamentals. He began by growing a mist propagation bed under an orange tree in the back yard, but the following year was offered the use of his chapter's greenhouse if he would manage the ornamental nursery operation. He accepted and for his labor received 50 percent of the plants grown under his supervision. The chapter furnished the tools and other equipment.

Besides propagating, irrigating, and handling the other production responsibilities, the horticulturist perfected some procedures for hardening tender plants against cold weather. He increased the livability of citrus by 90 percent with a budding technique and used soil sterilization to raise 85 percent of his leaf cuttings to salable plants. Similarly, he learned to force growth by injecting plants with liquid fertilizer and shortened the leaf to plant time by eight to nine weeks. To obtain more desirable plant varieties he began grafting and budding for different characteristics.

Norman helped to improve other Lake Wales FFA facilities at the same time. With the help of Advisors James Thornhill and J. C. Lane, Norman planned and established a sand pine and red cedar forest for raising Christmas trees and culled unproductive citrus trees from the chapter grove. Along with other members he helped renovate the FFA greenhouse and install an automatic irrigation system in it.

To gain more experience Norman went to work for Waverly Growers Cooperative, a producer of citrus. He assisted with the installation of 10 acres of overhead irrigation equipment, the maintenance of farm machinery, well drilling, and pump installations. He later became grove foreman and supervised a pruning crew of four.

However, as his plant business grew, Norman decided to direct more attention toward ornamental horticulture and sought work in a nursery. Because of the opportunity to learn about exotic and rare plants and for chances of advancement, he chose to work for Cypress Gardens, Inc., of Cypress Gardens. Since joining them he has helped plan and construct walks, bridges, and architectural landscaping and received a letter of citation for exceptional work as weekend gardener. He works for them about 130 hours a month.

In FFA Norman earned the Star Greenhand and Star Chapter Farmer awards, gained the Lake Wales FFA horticulture award for three years, and won the National Ornamental Horticulture Proficiency award. He also served as chairman of the school beautification committee, received a scholarship to the Florida FFA Forestry Camp, and was a member of his chapter's citrus identification team. So that he can enjoy his favorite hobbies of hunting and fishing more he helps landowners feed wild birds. His other activities included serving as chapter secretary and president.

Presently, Norman is studying ornamental horticulture at Polk Junior College in Winter Haven while continuing his cooperative placement program with Cypress Gardens. At the same time he is expanding his lawn and landscaping business and building up his plant inventory.

How Farm Products

Agricultural products travel to market faster than ever. Here's how they go!

Union Pacific Photo

American Trucking Photo

MANY new developments have occurred in the distribution of agricultural commodities within the past few years. By engineering equipment and handling techniques to fit a particular type of farm produce, transportation companies have stepped up the pace of goods traveling to market. Many of the most important adaptations have taken place in bulk handling and container handling of agriculture products.

Bulk Handling. Handling farm products and farm inputs in bulk is a fairly recent and fast developing service. Railroads and the trucking and shipping industries have established special services for handling bulk products. Modern equipment and new preserving methods have speeded up distribution, reduced labor, and improved the quality of farm produce, as is the case with most facets of agricultural production.

Specialized trains for transporting cattle in double deck cars and sheep and hogs in triple deck cars has been initiated by the railroads. Along several routes trains stop at shipping stations for just one commodity, say cattle, on the way to market. Giant covered hopper cars haul grains and other food stuffs from country, terminal, and subterminal elevators to processors or exporters. Rail service is well suited to bulk handling of farm products.

Trucks, on the other hand, move many agricultural products when within 300 miles of elevators and ports, in addition to making long-distant hauls. Consequently, they serve as connecting links between shipping ports and railheads for bulk grain, dry fertilizer, and

New 100-ton center-trough hopper cars, top photo, are ideal for grain, potash, and other bulk products. Refrigerated semi-trailers, center, are being loaded onto a cargo ship. Below, livestock has been the leading air-freight export and import for the last three years and will continue for now.

United Airlines Photo

Here wheat is being transferred from hopper cars into the hold of a ship.

Santa Fe Photo

Move

By Ron Miller

the like. Modern mechanical loading and unloading machinery have helped to increase the bulk handling by trucks, as well as that of trains and ships. This trend will undoubtedly continue.

Many bulk shipments not transported directly to outlets by truck or rail are transferred to barge and floated on inland waters. Again, the ease of reloading cargo has helped pave the way toward large barge shipments. Major docks now use barge carrier lifts that load an entire barge and its cargo into overseas vessels. Exporting and importing bulky products like dry fertilizer, grains, and petroleum are freighted almost exclusively by ship.

Other than the previously mentioned products many other agriculture commodities lend themselves to bulk distribution. Such items as sugar, flour, liquid fertilizers, chemical sprays and dusts, molasses, feeds, soybean oil, cottonseed oil, orange juice, and milk all move in bulk tanks or bins for part of their trip to market. Vegetables like potatoes, sugar beets, cabbage, and rutabagas also travel in bulk to processors by rail and truck.

Containers. Most of the agriculture products shipped in containers are more perishable than bulk items. And when it comes to airfreight, products are usually of high value.

Apples, grapefruit, celery, potatoes, alfalfa meal, and feeds eventually are transported in crate or bag containers by trucks and trains. These products and others that are preserved in cans and jars are then exported in larger open-top or bulk containers by ship or air.

Technology has played a big part in the container method of moving agricultural products. Containers are now light and made of resin, aluminum, plastic, paper, and other light, durable materials. With the development of refrigerated, insulated, collapsible and expandable, and tank containers, distribution of fresh fruits and vegetables has steadily improved.

Piggyback trailers on rail cars that can easily transfer to highway movement have assisted in speeding containerized products to market. With the advent of twin-trailers—two 7 foot trailers as opposed to one 40-foot trailer—the trucking industry can now combine over-the-road service with local pick-up and delivery between and within cities.

Large cranes and huge dock lifts also make transfer of container cargo an easy matter. With such lifts, semi-trailer boxes, often called flatbed containers, are hoisted in entirety from the trailer frame onto ships. In addition, hydraulic lifts are being used to load jet planes.

The most expanding area of exports and imports is airfreight which rose to over $6 billion in 1968, a fifth above a year earlier. Unlike ships who deal mostly with bulk products, airlines lift strictly containerized agriculture products. Agriculture products moved by air include fragile flowers, quickly perishable meats, strawberries, lettuce, asparagus, celery, hides and skins, and unmanufactured tobacco. Other high value items that travel by air in large quantities are resinoids, oils, spices, and hatchings eggs. Baby chicks and breeding cattle make up the biggest share of air exports.

Yes, the development of moving farm products to market has been tremendous. But getting food to a growing population, where it's needed, when it's needed, will require even more fantastic progress. Have you got any ideas?

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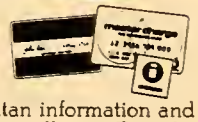

Westbound (*Read Down*)		Eastbound (*Read Up*)
6:30 p.m. Lv. Chicago	Ar.	1:30 p.m.
7:20 p.m. Lv. Joliet	Lv.	12:25 p.m.
2:05 a.m. Lv. Kansas City	Lv.	5:50 a.m.
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Goodyear Tire & Rubber Photo

The hose type portable sprinkler eliminates the need for fixed water lines.

Sprinklers Come Of

Here are many of the reasons why sprinkler systems have suddenly become popular for irrigating crops.

IRRIGATION is synonymous with modern farming and future crop production.

Over 38 million acres are now under irrigation by American farmers. Consequently, irrigation is the largest consumptive use of water—even though industry withdraws a greater volume. By the year 2000 farmers are expected to be irrigating some 55 million acres of crop land.

Farmers use 60 percent as much water for irrigation as industries use and four times that used by municipalities. Moreover, of the total water used for irrigation about 60 percent of it evaporates or is utilized by crops. On the other hand, 98 percent of the water used in industry and 83 percent of the municipality water returns to the source for reuse.

Taking these facts one step further, only about 25 percent of the water withdrawn for crops actually stays in the root zone. The USDA predicts that by 2000 there will be an 80 percent increase in irrigated crop land with only a 20 percent increase in water withdrawals. To supply that much irrigation water with such efficiency, better methods of application must be employed.

Much has already been done in the design and operation of equipment. Concentrating on the effectiveness of water, manufacturers continue to build new and improved irrigation systems. And farmers make better use of todays more efficient systems through proper operation and timing of applications.

As a result, sprinklers have become one of the most popular methods now in use. Although they were introduced around 1900, their use didn't really expand until after World War II. Then with the advent of aluminum pipes and quick couplers, their acceptance spread rapidly. Nowadays, sprinklers with durable, light-weight pipes and dependable, high-pressure pumps can be purchased to fit weather and cropping conditions.

Three Standard Types

Generally, sprinklers can be categorized into three types—permanent, semipermanent, and portable.

Permanent systems find their greatest use in nurseries, orchards, citrus groves, and other high value crops. With such systems both main and lateral lines are buried so they won't interfere with field work. Therefore, installation costs of permanent sprinklers are generally higher than other types. But since only sprinkler heads and riser pipes are movable, labor and maintenance will be lowest of the three.

The cost for installing *semipermanent* equipment will run less than permanent sprinklers because only main lines are buried in the the irrigation area. On the other hand, labor expenses and repairs increase since lateral lines as well as sprinklers are portable. Mechanical-move equipment such as end-tow and center-pivot systems include these features.

Because both main and lateral lines of *portable* systems are movable, they offer more flexible field use. When more than one water source is available portable pumps can also be utilized. However, even though portable sprinklers can be set up for less, they will cost more to maintain. Labor is likely to be higher than other types, but this depends on whether equipment is hand-move, solid-set, or mechanical-move (side-roll and trail-line systems).

Why Use Sprinklers

With all sprinkler systems, component parts must be matched to each other and to the soil, crops, and climate. Selecting the best sprinkler, or any other method of irrigation, requires careful consideration of topography, soil type,

Self-propelled sprinklers like this one provide ample clearance for tall crops.

Valley Manufacturing Photo

Some pivot systems utilize hydraulically

...age

power cost, water source, and labor availability.

Sprinkler systems permit flexible use of crop rotation and other cropping practices. Since row spacing is not critical and borders, benches, furrows, and ditches aren't present, sprinklers allow for more efficient machinery operations.

In addition, sprinklers do not hinder conservation practices but rather help erosion control. Their uniform and natural distribution of water reduces deep perculation losses, helps control surface runoff, and eliminates ditch losses. Care, however, must be taken in hot, windy weather as drift and evaporation greatly affect water distribution.

Sprinklers work well for making light, frequent applications on most soils—including shallow, sandy soils. Applications at proper times provide good control of moisture conditions during seed germination and plant emergence. The effect of sprinkling also lessens the need for crust-breaking tillage.

Costly power units are needed to supply pressure for sprinkler operation. Other equipment costs will run higher than with furrow, border, and surface irrigation. But consider these costs in relation to an investment in land leveling and ditch lining. Most sprinklers can be adapted to rough and level land alike without disturbing the topsoil.

Sprinklers offer many additional advantages. They can be used for cooling crops, protecting against frost, and improving soil conditions before tillage and harvest. Finally, the ability to apply liquid fertilizer adds to the versatility of modern sprinkler systems.

driven winches to move the sprinkler unit.

White Oliver Photo

Calling You

THE heart beat of our country and possibly the pulse of the world is in Washington, D.C. People, cars, buses, planes, lights, buzzers, and sirens, like in any large city, are all geared for the work week and continual flow of the tourists. But in Washington the wheels of leadership grind, computers hum, papers fly, and the dollar is stretched and stretched to service the masses and individuals of America like you and me.

Combine this rumbling, running, and racing with historic beauty and you have a breath capturing place like none other in the world. And with the expanding leadership program of SUMMER '70 offered by the National FFA Organization, a trip to our nation's capital can be an education in itself.

Chapter Impact Conferences

To see Washington is only part of the SUMMER '70 FFA conference program. Just south of Washington at your National FFA Center jackets are stitched, plaques are engraved, magazine articles written, conventions and conferences are planned, and FFA members, advisors, and staff meet to plot the FFA of tomorrow.

At the Center this year, more than ever before, *chapter programs* will be discussed and revitalized through SUMMER '70 National Chapter Impact Conferences. State and national activities will be dealt with by national FFA officers and a competent conference and center staff. If your chapter sends a representative to a Chapter Impact Conference this summer, the doors of leadership will be opened even further for other chapter members. Chapter officers and advisors can apply for any of the three conference dates: June 15-20, June 22-27, and June 28-July 3.

Leadership and Citizenship Conferences

The FFA needs leaders at all levels and so does the industry of agriculture. Agri-industry is looking to vocational agriculture for many of its trained and experienced leaders.

The FFA has developed a strong leadership program at the chapter, state, and now national levels. This year the National Leadership and Citizenship Conferences will extend new *leadership opportunities* to more FFA members. You can expand your leadership ability by attending a National Leadership and Citizenship Conference. As a chapter, area, district, or sectional officer you can attend one of these conferences on July 6-11, July 13-18, and August 3-8.

The cost for one complete conference week is only $95.00—including conference notebook and materials, all meals, lodging, and travel while in Washington, D.C. To be a part of these exciting leadership programs send your application and a $20.00 deposit to the National FFA Center, Dept. L, Alexandria, Virginia 22309. For more information about either conference refer to the SUMMER '70 brochure already sent to your chapter.

Yes, during SUMMER '70 FFA officers from all parts of the country will speak up for their chapters and improve their talent for leading others. Will you be one of them?

THE CHAPTER SCOOP

news, notes, and nonsense from everywhere

by Jack Bitzer

Freshmen who pay their dues before the deadline receive a free "FFA Member Lives Here" sign. *Limestone,* Maine, Chapter.

N-N-N

Cumberland, Wisconsin. Junior chapter president **Bill Bergstrom** reports that FFA held its annual spaghetti and pizza supper.

N-N-N

Canton, South Dakota, received permission from school administration to give free lifetime passes for all high school activities to senior citizens in their district.

N-N-N

Omak, Washington, Chapter was responsible for the 80 Christmas trees used in their school system. FFA cut them on an outing to Cook Mountain.

N-N-N

Luray, Virginia, FFA took first place in their federation's rifle shooting contest.

N-N-N

And the *Pilot Grove,* Missouri, FFA softball team took first place in the community softball program.

N-N-N

National FFA Convention trips were top prizes in FFA livestock show at Anderson County, South Carolina, Fair. Trips are awarded annually by *Anderson County* FFA Foundation.

N-N-N

Door prize at *Virgin Valley,* Nevada, FFA Harvest Ball was a half a beef. Made it worth going even if you didn't have a date.

N-N-N

FFA basketball team played the Young Farmers in *Plymouth,* Indiana.

N-N-N

From *Menno,* South Dakota. After the meeting, four tug-of-war teams were chosen. Winner got a free lunch. Losing teams were pulled through a snow bank.

N-N-N

Greenhand **Dennis Pierce** of *North Kingston,* Rhode Island, FFA reports that chapter spent several weekends cutting firewood to sell. Money going for a greenhouse.

Junior FFA at *Belmond,* Iowa, toured a business firm's computer center.

N-N-N

FFA chapter in *Fleming* Junior High in Oregon only has 19 members. But they've got lots of spunk.

N-N-N

Message on *Chariho,* Rhode Island, FFA calendars was "Chariho FFA Builds a Better Way."

N-N-N

Bladenboro, North Carolina, members built small utility sheds and then sold them. Earned while they learned.

N-N-N

A generous idea. *Grove City,* Pennsylvania, raised $82.50 from collecting deer hides. Donated money to county children's home.

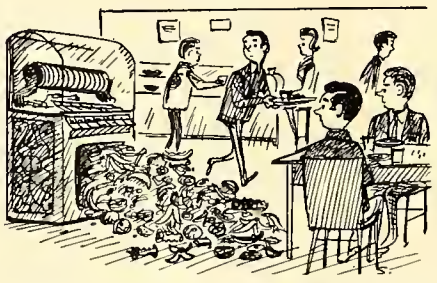
N-N-N

Les Tallman, reporter for *Lenapah,* Oklahoma, writes that chapter is making big plans for its fund raising rodeo.

N-N-N

Top distributors of Safe Corn Harvest materials at *Fredericksburg,* Iowa, get FFA T-shirts.

N-N-N



Spanish Fork, Utah, makes $10.00 a week from a juke box in the school lunch room. Most played song is "Fresh Garbage."

N-N-N

Safety Improvement Association of *Rugby,* North Dakota, Chapter taped a month series of 30 second radio spots for use on local radio about Do's and Don'ts of Snowmobile Safety.

N-N-N

Members of *Osmond,* Nebraska, FFA hosted two Japanese exchange students at a recent meeting.

N-N-N

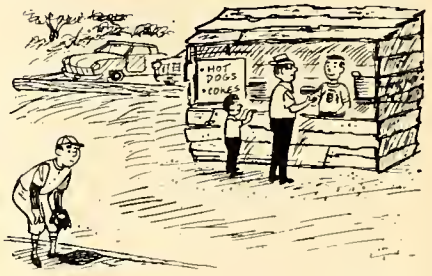
FFA and FHA at *Platte Valley* High in Kersey, Colorado, took a two week medical self-help course. Toured fallout shelter. Report that mouth to mouth resuscitation exercise was fun.

N-N-N

David Winckler, *Zillah,* Washington, FFA, harvested 190.24 bushels of corn from his acre plot. Made him western division winner in 304 Bushel Challenge contest.

Received two real fine chapter newsletters lately. *Talawanda FFA Messenger* from Oxford, Ohio. And *Holdenville,* Oklahoma, *FFA News Notes.*

N-N-N



The *Balaton,* Minnesota, Chapter built a concession stand out of lumber from old buildings. They say they plan to build a better one next year.

N-N-N

Chapter sweetheart of *Lake Wales,* Florida, FFA, was named one of the three outstanding students of Lake Wales High School. They're proud of her.

N-N-N

Osage and *St. Ansgar* Chapters in Iowa exchange scholarship plaques at a joint chili supper.

N-N-N

Gary Bohnet won first place and $15.00 in *Lodi,* California, FFA almond sales. Chapter made $860.00.

N-N-N

A new committee was added to *Otis,* Colorado, FFA program of work—citizenship committee.

N-N-N

FFA'ers at *Amboy,* Minnesota, started a chapter library with funds raised during Operation Work Day.

N-N-N

South Kitsap, Washington, held its annual Dessert Hour—then initiated Greenhands.

N-N-N

Gilmer County, West Virginia, Chapter supplied home-made ice cream for Christmas dinner for everyone in high school. Sounds good to me.

N-N-N

Wilmot, Milbank, Watertown, and *Roslyn* Chapters were invited to the *Webster,* South Dakota, Parent-Son Banquet.

N-N-N

Alvirne, New Hampshire, has gathered food for a Christmas basket for nine years.

N-N-N

The basket was really full this time, so don't let it go empty. Keep shoveling the N-N-N to me.

Nick Nichols is a driver.

Whether it's driving down the face of a wave, just ahead of the curl, or planning for a career, Nick Nichols believes in doing it right.

At the University of Hawaii, where he is a major in Business Administration, Nichols keeps his marks well above average, surfs at every opportunity and takes Army ROTC.

In ROTC, Nick is learning to lead and motivate others. And from this comes greater confidence in his ability to handle situations and make decisions.

When Nichols graduates, he will fulfill his military obligation as an officer. But he would recommend Army ROTC to men *not* planning an officer's career or *not* facing military service. Why? Because employers look for and pay extra to get young men with Army ROTC leadership instruction and management experience as an officer.

If you're heading for college, fill out and mail the coupon today.

Take command of your future . . . take Army ROTC.

Army ROTC
P.O. Box 12703
Philadelphia, Pa. 19134

NFF 4-70

I'd like to know more about Army ROTC and what it can do for me.

Name_____ Age____

Street_____

City_____

State_____ Zip_____

An "Over the Fence" look at agricultural prices and production for 1970.

LARGER marketings and slightly higher prices will result in an increase in gross farm income in 1970. But production expenses will continue to rise, so the realized net income will probably match last year's $16 billion earned by farmers, a rise of $1.2 billion from 1968.

This is the general forecast for agriculture production and income as reported by USDA representatives at the 1970 National Agricultural Outlook Conference. For a closer look at what you can expect in the year ahead, here are the following price and production expectations as reported in Washington, D.C.

Livestock

Beef. Cattle production is expected to increase 2 to 4 percent in 1970, following a 1 percent gain last year. Large marketings of fed cattle at heavier market weights will boost beef output, but another reduction in slaughter of nonfed cattle will limit the upswing. Also, with nearly a 2 percent larger cow herd this year's calf crop will be larger. Cow slaughter should run about the same as a year earlier.

Feeder cattle prices are expected to remain high in relation to fed cattle prices, but later in the year will depend to a considerable extent on price movements of fed cattle. Cow prices will likely stay above a year earlier although they will decline seasonally. Prices for veal calves are expected to remain above the year earlier average of $38.75 per hundred pounds.

Hogs. With a smaller fall pig crop, pork production will continue considerably below a year earlier in the first half of 1970. However, if producers carry out expanding production plans, summer slaughter will be equal to or a little larger and fall slaughter will run moderately above a year ago.

As a result, prices for barrows and gilts will likely run near $27 per hundred pounds, with a smaller than usual seasonal rise in late spring. Thus, price gains over a year ago will narrow in the summer. Fall prices will decline and average below last fall's but should stay well above those of most recent years.

Sheep and Lambs. Sheep and lamb slaughter in the first half of 1970 is expected to be down from a year ago. This year's lamb crop will also likely be smaller than last since there are 4 percent fewer ewes one year old and over. Prices are expected to rise as spring lambs reach market and then follow the usual decline pattern to a low in late summer or early fall.

Poultry and Eggs. The output of eggs, broilers, and turkeys is expected to increase in 1970. Thus, prices for all poultry products should average well above last year in the first half of 1970, but fall below last year's prices in the latter half.

Dairy. Milk production this year should change little from the 116.2 billion pounds of 1969. Milk cow numbers are running about 2 percent under a year earlier and milk production per cow is up about the same amount.

Prices farmers receive for milk will average higher than the record $5.45 per hundred pounds in 1969. Therefore, income from milk is expected to exceed the $6.2 billion estimated of last year. These forecasts assume that price support levels and Class I pricing in federal order markets will remain unchanged.

Crops

Cotton. The outlook for cotton in 1970 again shows both a reduced supply and fewer exports. But an increase in the national allotment by 1 million acres and liberal skip-row planting rules for measuring cotton against the allotment should encourage greater plantings. The price support payment, at 16.80 cents per pound, is up from 14.73 cents paid in 1969.

Feed Grains. The goal of the 1970 feed grain program is to divert about 38 million acres from feed grain production, slightly below the total acreage diverted in 1969. Prices are expected to remain somewhere near 1969 levels with corn and sorghum prices averaging moderately above a year earlier and oats and barley down slightly. Overall, the expanding consumption of feed grains by livestock is expected to approximate increases in production.

Rice. The 1970 national rice acreage allotment is set at 1,836,461 acres, down 15 percent from last year. Meanwhile, the national average price support of $4.81 per hundred weight—up 9 percent from 1969—will be available to growers.

Soybeans. Although the prices received by farmers for soybeans are averaging 10 cents below a year ago, they are expected to rise above the 1970 support price. The support price dropped from $2.50 per bushel in 1968 to $2.25 per bushel in 1969 and will continue at the 1969 price in 1970. With the 1970 bean crop predicted to about equal 1969's and exports and feeding needs expected to increase by 15 percent, soybean supplies could tighten.

Tobacco. The consumption of tobacco is expected to total near last year's level. This will mean another reduction in carryover supplies even though growers will probably harvest the same acreage in 1970 as last year. Price supports will go up 4.3 percent so last year's level of cash receipts will probably be maintained.

Wheat. Wheat production in 1970 is estimated to drop some 120 million bushels from 1969 output and the price support loan rate will remain at $1.25 per bushel for the fifth year. Extensive farmer use of the loan program and anticipated gains in exports brighten 1970 wheat price prospects.

Fruits and Nuts. Fruit supplies during most of 1970 are expected to total substantially above a year earlier. Coupled with a larger pack, supplies of canned deciduous fruits—especially apples, pears, and grapes—will be considerably larger. Growing conditions indicate more fresh citrus fruits will be available. Prices for most citrus are generally running higher than a year ago while deciduous prices will likely continue below last year's.

Nut supplies are well above a year ago, with walnuts and almonds reaching record levels. Prices, however, should remain fairly steady.

Vegetables and Potatoes. With large supplies of frozen vegetables—especially lima beans, carrots, and sweet corn, moderate carryover of dry beans, and the largest pea supplies in years, processors are expected to keep packs of many vegetables at or below last year. Both potato and sweet potato supplies are up slightly from a year ago, however, a small reduction in acreage is predicted.

Prices for processed vegetables, while above levels of a year ago, should remain moderately stable through spring. Potato and sweet potato prices are generally below last year's but should strengthen on into the spring. Dry bean and pea prices are expected to remain below last season's relatively high levels.

YOU CAN'T LOSE

IN

d-CON's BIG "RAT CONTROL" CONTEST

2 FINE, REGISTERED HEIFERS TO BE GIVEN TO 2 LUCKY YOUNG FARMERS and EVERY ENTRANT GETS 50¢

Just complete this sentence in 40 words or less,
"We Get Best Rat Control On Our Farm By Using d-CON Because....."
Along with your entry, send in a d-CON® Ready Mixed Box Top and We'll Send You 50¢.

If you're a winner in d-CON's "Rat Control" Contest, you'll receive a fine, quality-bred, *registered* heifer—to be selected from an outstanding breeder. Your heifer will be of recognized blood lines . . . suitable for VO-AG Project Farming . . . excellent show potential . . . foundation stock for your herd!

Read the easy rules and enter the contest today. Just a few words may make you the proud owner of your own registered heifer. So get going right now!

FACTS ABOUT d-CON TO HELP YOU WIN

- d-CON is the way to rid your farm of rats *completely*.
- d-CON is one rat killer that works and keeps on working—because it contains no violent poisons—never makes rats bait shy!
- Rats just can't resist d-CON's EXCLUSIVE LX 3-2-1 formula! d-CON used as directed, is safe to use around children, pets, poultry and livestock!
- Every package of d-CON comes with 4 ready to use, bait filled trays, specially made for maximum bait acceptance.

RULES

1. To enter d-CON's big "Rat Control" contest, just complete the following sentence in 40 words or less, "We Get Best Rat Control On Our Farm By Using d-CON Because . . ."
2. Use coupon or write your entry on separate paper and mail entry with your name and address plus one (1) box top from any package of d-CON Ready Mixed, to d-CON, Dept. H, 90 Park Avenue, New York, N.Y. 10016. Send as many entries as you wish. One box top to an entry.
3. Entries must be postmarked by June 15, 1970.
4. Decisions of judges will be based on originality and aptness of thought and expression. The judges' decisions will be final. Winners will be notified not later than August 1, 1970.
5. Anyone living in the United States, its territories and possessions and Canada may enter except employees of The d-CON Company, Inc. and its advertising agencies and the families of such employees. Each entry must be the original work of the contestant submitting it and be submitted in the contestant's own name.
6. All entries become the property of The d-CON Company, Inc. to use as it sees fit and none will be acknowledged or returned. Winners will be notified by mail. Full list of winners will be sent approximately six weeks after close of contest to anyone enclosing a self-addressed, stamped envelope with entry. This contest is void in all areas where it is taxed, prohibited or otherwise restricted.

The d-CON Company, Inc. Dept. H
90 Park Ave., New York, N.Y. 10016

Gentlemen:

We Get Best Rat Control On Our Farm By Using d-CON Because_____

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CITY_____ ZONE_____ STATE_____

Remember To Enclose Box Top From Package Of d-CON Ready Mixed (1 lb., 3 lb., or 5 lb. Size) and we'll send you 50¢.

Listening and locating the stations can be enjoyed by the family.

Keep An Ear On The World

By Robert Foy

BEING a short wave listener (SWL) means you can tune in a Brussels radio station broadcasting talks or light music. It means you can listen to Peking, China's news broadcasts or pick up a station in Senegal, North Africa, broadcasting native music or the news in French.

On top of the enjoyment, many young men and women are broadening their geographical and political horizons through short wave listening. If you're looking for a new perspective, tuning in on world broadcasts may be just your cup of tea.

Take it from Al Forbes of Seattle, Washington, who has been a SWL for six years. "I was ashamed of my ignorance of geography and people before I became 'addicted' to short wave listening. Since then I've learned a great deal by spending a spare hour or two with my radio receiver. Being an SWL is more than a hobby; it's part of my education."

Why not use the short waves to bone up on your second language? Many high school students are struggling with that required foreign language and sometimes wondering if it's worth it. As a short wave listener you can tune across the receiver dial and pick up broadcasts in Spanish, German, Dutch, Japanese—you name it, and there is a station that broadcasts it.

Once you get your feet wet as an SWL, you'll soon learn that the British Broadcasting Company identifies itself with the chimes of Big Ben; "Columbia, The Gem of the Ocean" marks broadcasts of the Voice of America; and the raucous call of the kookaburra bird tells listeners it's Australia. As an SWL you'll soon learn some key foreign phrases which help you recognize the country. Huna El Kahira quickly becomes Cairo, while Aqui Lisboa, is Lisbon, Portugal.

Some SWL fans spend much of their time tuning in ham radio operators the world over. It's no problem at all to pick up Japan, South America, Africa, Europe, and Australia within a few hours of each other.

Ham operators all use an international language—English. Many foreign hams like to talk about world affairs. Many are fascinated with life in the United States. They want to know about our country and about us.

It may surprise you to learn there are short wave listening clubs all over the country. The oldest of these is the Newark Radio Club, 215 Market Street, Newark, New Jersey 07101, started by a newspaper woman in the 1920's. The club puts out a monthly bulletin which carries news from members all over the country. For those who want to break into the fascinating game of listening in on the world, the club will give you an introductory packet with some sound basic advice on just how to get started.

There's another angle to short wave listening, the collecting of certificates. The Newark Radio Club awards many of these certificates which are given for confirmation of stations heard. A listener must log accurately the station heard, time of day, and frequency.

Most of the larger government and commercial stations have a standard procedure for replying to listener's reports, called QSL cards. Many short wave stations are also vitally concerned with world-wide coverage and welcome reports. When a QSL card is received, some fans tack them on the wall of their room, or "listening shack."

A big leader in the competition to log short wave stations of all kinds is James Young of Wrightwood, California. He has verified 230 countries, all 50 states, all 12 Canadian areas, as well as all 40 world zones.

The only thing you need to "get on the air" is an inexpensive short wave receiver. Prices run all the way from under $100 to more than $500 for the well-heeled SWL. However, don't let the prices keep you from listening.

Several companies offer build-it-yourself kits. A good beginning short wave receiver kit can be bought for under $25.00. A step or two up the ladder is one for $40.00, and one for $80.00. For the sophisticated, "professional" SWL there's one for $250.00.

Several of the nationally circulated electronics magazines carry a monthly column on short wave listening. They tell readers of new stations and countries interspersed with a variety of additional information on listening techniques, QSL cards, reader reports, and many others.

So, come on now. Here's your chance to keep an ear on the world. Amaze your friends with a casual mention of the morning's news from Goa, the excellent dance band heard last night from a Georgetown, South Africa, hotel, or the report picked up just an hour or so ago from Cyprus. But more important, short wave listening combines learning with fun.

Short wave listening is a good way to learn about people and world events.

Running the fence used to be an all-day job. Now you can be back at the house by lunchtime.

The 90 Enduro HT-1 is the newest of a new kind of motorcycle: the superlight dirt bike. It weighs in at just 187 pounds and has what it takes to put in a full day's farm work, then take time out for fun. It has special Enduro front forks and a wide-ratio 5-speed gearbox with a lower low to get through the rough stuff. Try an HT-1 like the one below and in the rear, above. Or the 100 Trailmaster L5-TA, also shown above, with Trailmatic drive for two sets of speeds at the flip of a switch. They're a couple of the best farmhands you could hire.

Yamaha International Corporation
P.O. Box 54540, Los Angeles, Calif. 90054
In Canada: Fred Deeley, Ltd., Vancouver, B.C.

YAMAHA
It's a better machine

Season's Greetings? The time is now for chapters to place their orders for 1971 Official FFA Calendars to distribute during the 1970 Holiday season. (Don't be tricked into thinking that's a long way off.)

The title of the 1971 FFA Calendar illustration is "Useful Citizenship."

This painting depicts a group of America's young people learning to be useful citizens without giving much thought to the fact that they will be better citizens. The teaching medium—a community park where these FFA members recognized the need for some improvements.

Useful citizenship need not be taught in a classroom lecture; nor can it be a mere suggestion on a sign or billboard.

They set their minds to do something about it—not just complain that the park needed work on it. Participation is a major key to useful citizenship. It takes getting in there and doing whatever needs doing—making a contribution.

Community participation is an important endeavor in FFA chapters across America. The list of activities by members is a long one—picking up trash along highways, making picnic tables for local parks, conducting auto safety checks, helping to clean up after a barn fire, sponsoring community-wide events, or teaming up with other community groups.

Useful citizenship is a desirable product from the work by FFA members in their local communities.

How can your chapter participate? There are three ways FFA chapters can participate in this public relations program.

Chapters who get a business firm to sponsor the Calendar in the interest of the FFA chapter use Plan A. Chapters who order some Calendars with the chapter's name on them or with appreciation-for-your-support messages use Plan B. Individual members or chapters who want just a few Calendars use Plan C.

There are three styles of FFA Calendars—a tent-style desk Calendar, a large poster style, 13 x 21 inch, and a home and office style with 12 color pictures about FFA.

For more information about how your chapter can use the FFA Calendar and for sample Calendars, request a *kit* from ***The National FUTURE FARMER***, P. O. Box 15130, Alexandria, Virginia 22309.

Free for You

THESE materials are free! You can get a *single* copy of any or all of them by mailing the coupon below. Just circle the items you want and send your *complete* address.

102-The Salesman—How do you decide if you want to make a career for yourself in selling? This 16-page booklet can help you explore the field from A to Z. It was written by Donald Robinson, a frequent contributor to *Reader's Digest* and other magazines, and tells what traits you need to be an outstanding salesman, about financial rewards and security, and how a salesman's social status compares to other professionals. (Sales & Marketing Executives International)

103-Identifying Weeds and Grasses—This booklet is your guide to identifying and controlling those weeds that bother you each growing season. It provides full-color illustrations of 54 of the most undesirable weeds found in America. A full page is devoted to each weed noting the characteristics of stems, leaves, and flowers or seed heads. Additional information about the family and scientific name is also presented. (Elanco Products Company)

104-After My College Degree . . . What?—Authors of this booklet say that careers in the farm and industrial equipment field can be most rewarding. They describe and illustrate opportunities in sales, manufacturing, engineering, and accounting within the implement industry. Specific occupational areas are also singled out within these major divisions. (International Harvester Company)

105-Solid-Set Irrigation—Every possible use for a solid-set irrigation system is pictured in full-color within this 14-page booklet. Further information about the advantages, how to design a system to fit your needs, and other pertinent facts about labor requirements, chemical and fertilizer applications, and other uses are all described. (Reynolds Metals Company)

102 103 104 105

Send to:
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P.O. Box 15130
Alexandria, Virginia 22309

Name.....

Route.....*Box No*.....

City.....

State.....*Zip*.....

Offer not good after June 30, 1970

The Fun Of Giving

WASCO FFA Chapter of California, and the Wasco Kiwanis Club teamed up to provide an exciting day at Disneyland for the children of the North Kern Orthopedic School.

The FFA chapter earned over $200 to provide tickets, hats, balloons, and favors for the children. FFA members worked afternoons and weekends taking jobs like lawn mowing, raking leaves, and working on the school farm. The Kiwanis furnished the transportation and food for the group.

The bus trip was about four hours long, but Wasco members used the time to get acquainted with the instructors and 15 children of the handicapped school. While traveling, the instructors provided the children with refreshments. Upon arrival the FFA members were assigned to the child they were to take care of for the day and wheel chairs were rented for the children.

In all, the youngsters spent about ten hours on the various rides and viewing the attractions of Disneyland. A few they enjoyed the most were Pirates of the Caribbean, Jungle Island, It's a Small World, and Lincoln's Memorial. The FFA members helped the children on and off the rides and rode along beside them to insure the children's safety.

As we wheeled the children along, many tourists expressed favorable comments about our interest in the children. It made us proud to do something for the children and we were grateful for the privilege of working and going on the trip.

All in all, the trip was very much worth the time and effort. The children were truly grateful and the Wasco Future Farmers have expressed a desire to make this an annual affair. A trip for the youngsters each year, perhaps to a zoo or some other place of interest to them. The chapter organized the trip with the help of Advisors Charles Craig, Gary McDowell, and Greg Ohanneson. *(By Keith Howard and Roy Rey, Reporters)*

"TIMBERLINE"
$6.00

Tall rugged weave fiber with cooling side vents. Popular Canadian crease can be reshaped to your preference. Timberline Jr. available in boys sizes — $5.00.

"CUTTER"
$7.95

Genuine hand-woven hemp rope straw in a cool open weave. Brahma crease easily reshapable to your choice.

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SPORTRAIT

By Stan Allen

GOLF Magazine Photo

Arnold Palmer tees off during one of his late "charges."

ARNOLD Palmer, a professional golfer, was named Athlete of The Decade for the 1960's in a nationwide poll of sportswriters and broadcasters. This was an outstanding honor for Arnold as well as for his sport, golf. Unlike football or baseball, a golf course is strung out over 1½ miles of ground which makes it a poor spectator sport. Palmer with his many unique expressions and characteristics; the now famous Palmer "charge"; and "Arnie's Army" has brought the popularity of golf up to an all-time high.

Palmer, the son of a golf pro from Latrobe, Pennsylvania, was hitting a golf ball almost by the time he learned to walk. He has been playing competitive golf for 26 years and started playing in a high school match when he was 14, by shooting a 71. Arnold was a Pennsylvania State High School champion and finished second in the 1946 Los Angeles Hearst National Junior Championship. He won the Western Pennsylvania Amateur five times and three Western Pennsylvania Junior Championships.

His fine high school play won him a golf scholarship to North Carolina's Wake Forest College. There he won two Southern Conference titles, earned a degree in business administration, and finished high in intercollegiate competition. He served three years in the U.S. Coast Guard from 1951-1954 and luckily had a chance to play some golf. Arnold came back with ambitions to make good in golf and worked hard to win the 1954 U. S. Amateur Championship. This success encouraged him to turn pro that same year.

Palmer scored his first big win on the pro tour in the 1954 Canadian Open for a check of $2,400. It took him only four years to reach the top of the money winnings list when he won $42,607 in 1958. This is a yard stick used to rank golfers. Palmer led the winnings list four times and finished second twice during the ten year period. He still leads the All-Time Money Leaders list with total winnings at the end of 1969 of $1,158,239. He is second on the All-Time Tournament Winners list with 53 wins to Sam Snead's 58.

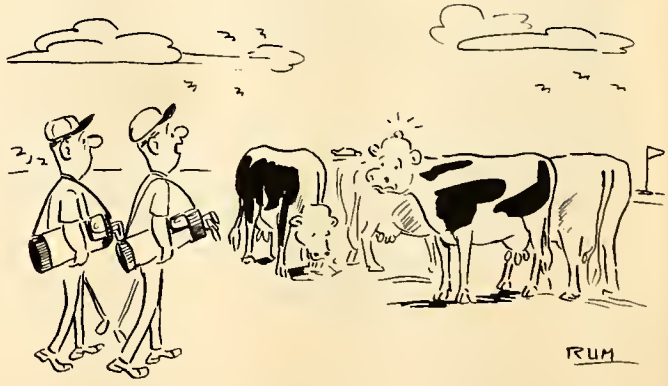
Some experts still do not class Palmer with the top players of the game. He does not have the smooth swing of Snead or the iron magic of Ben Hogan, he just gets the ball in the cup. Arnold was an early model of the new era of golfers. He is a 180 pound, 5 foot, 11 inch, go-for-broke swinger and has been one of the longest drivers in the game.

A great competitive spirit has made him famous for late charges as he is notorious for sub-par last round finishes. In his 1960 National Open win he was in fifteenth place and seven strokes behind going into the last round. He then fired a 65 to win, the best closing round ever shot in the Open.

Among his other major tournament wins are the Colonial National Invitation Championship, two Western Open titles, three Tournament of Champion wins and two British Open crowns. He is also the only golfer to ever win the Masters four times. Arnold was part of the winning team in six World Cup matches and has been on four Ryder Cup teams. The Professional Golfers Association (PGA) named him Player of The Year in 1960 and 1962 and he has won the Vardon Trophy four times.

Troubled with a hip ailment in 1968 and part of 1969, Arnold went into a 14 month slump and even had to qualify to play in the U. S. Open last year since he hadn't won a major tournament the previous season. This caused the experts to downgrade him again as they did in 1961. Palmer came back last November to prove them wrong by winning the Heritage Classic and then won the Thomas-Diplomat Golf Classic two weeks later to prove it was no accident.

Palmer's many varied interests in the business world has taken a lot of his time away from golf. He has indicated he would devote more time and concentrate on his golf game this year. He will be trying to win the one major tournament that has eluded him, the PGA championship. Arnold Palmer has to be considered a serious contender whenever he steps up to the first tee, and you can bet his "Army" will be right behind him.



"I'll be glad when we finish paying the farmer for this land."

FFA IN ACTION

"No use crying over spilled milk," was very true for WCCO radio announcer Roger Erickson. He lost a cow milking contest to Stillwater, Minnesota, FFA'er Bruce Rydeen when the cow kicked over his bucket. Bruce is State Secretary.

FFA Mother's Club

The Mother's Club at Stockton High School contributes a great deal to the success of the Stockton, Missouri, FFA.

The chapter has an enviable record in FFA circles and their whole community takes pride in them. The mothers deserve a share of the credit. The money they raise helps members in their projects and contests plus some niceties. They raise money by feeding a lot of people.

Their main source of income is the food stand at the Stockton Walnut and Cheese Festival. They sell hamburgers, hot dogs, coffee, soft drinks, chili, beef stew, and homemade pies and cakes. The fathers help out too—doing mostly heavy work. Lunch stands at farm sales and a chili supper are other sources of income.

Money the Mother's Club raises has bought extra equipment for the vocational agriculture shop. It has also paid expenses for members to state competitions and fairs.

Mothers bring picnic lunches to all FFA members at fairs and serve refreshments at the annual barnwarmin'. A big event each year is the parent and son banquet. The moms served barbecued chicken to about 300 last year. They also present dictionaries to all college bound seniors.

The ladies meet twice a year. There are no dues. The first meeting in the fall is to acquaint the mothers of new members with the planned activities. They appoint committees and elect officers to help make plans for their various projects.

The club lists over 100 members and everyone gets into the act during the year. It's not just ladies from farms either. Many non-farm members and their mothers are involved. And some mothers of students who graduated still belong.

Their club is 10 years old and has only one qualification for membership—"The instincts of a mother hen." *(Leland Fox)*

Hanlon Named to NCVA

President Nixon has appointed Jeff Hanlon to the board of directors of the National Center for Voluntary Action (NCVA). Jeff was National FFA President in 1968-69.

NCVA is an outgrowth of a Nixon campaign speech encouraging voluntary efforts to solve the nation's problems. It was brought into existence in the fall of 1969 through the efforts of Mr. Nixon and Secretary of Housing and Urban Development George Romney. Several cabinet members serve on the board of directors including Secretary of Agriculture Clifford Hardin.

Jeff described NCVA as not administered by but working in cooperation with the federal government. It is private, independent, non-profit, and incorporated. The liaison between NCVA and the President's Cabinet Committee is former football coach Bud Wilkinson.

According to Jeff, some NCVA purposes closely parallel some of the work in FFA. He mentioned examples such as seeking to improve the urban-rural crisis, to improve environment and "quality of living," and to restore American confidence.

Jeff attended a board meeting in Washington, D.C. in February. They met during the day and that night had a black tie dinner at the White House with the President and Mrs. Nixon.

Snowmobile Race

A snowmobile race turned into a big fund raising project for the Limestone, Maine, FFA. They cleared $500.

The races were a big job for the chapter and it took 100 percent of the members' cooperation. Steve Shaw, FFA vice president, was project chairman. FFA members served on committees for advertising, rules and officials, trophies, concessions, public address system, grounds and clean up, and thank yous. A general meeting was held to enlist support of key persons in the community.

The Sno-Drifters, a snowmobile club from a nearby town, helped the FFA prepare the track and set up the rules and regulations. FFA will help them with their races later in the year.

A total of 71 registrants came from as far as 205 miles for the 16 races with first, second, and third place trophies. Machines were grouped into five classes according to cubic centimeter classification of the engines. There were three classes for junior (under age 18) and three classes of powder puff races. Registration was $3.00 per machine.

(Continued on Page 34)

Peter Legassey, left, receives class four oval race trophy from Steve Shaw.

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FFA in Action

(Continued from Page 33)

Registration started at 10:30 a.m. Races started at 1:00 p.m. and ended at 4:00 p.m. It was about zero degrees which kept the crowd to about 1,400 persons. Admission was $1.00 (free for under 12). Advertising and posters were distributed in Maine and Canada. Limestone is near the border.

Trophies valued at $494.00 were for the five lap oval and half mile drag races. Snowmobile dealers donated some of the trophies and had their names listed in the program.

The races were held at an old stock car track. Town officials allowed FFA to fix it up including the concession stand and ticket booth. Now others are planning races at the same location as the site is becoming well known. Snowmobiling is a top sport in Northern Maine. Only eight families of FFA members do not own snowmobiles.

Parents helped too and four dads were race officials. It took FFA'ers six hours to clear snow off the parking lot.

Four chapter sweetheart candidates (one picked by each vocational agriculture class) sold tickets on a $50.00 snowsuit. Kathy Ward sold the most tickets and was named 1970 Chapter Sweetheart. *(Clayton Sirois, President)*

"Big Jim" Biggs before the microphone at KTIL radio station where he works.

Office Leads to Career

Jim Biggs has been taking advantage of his FFA officer experience to prepare for a career in communications.

The 1968-69 reporter for the Tillamook, Oregon, FFA Chapter began by spending a lot of time doing odd-jobs around radio station KTIL about the time he was a Greenhand. His first active role came in a student program called "Cheesemaker Chatter" which centers around activities at Tillamook High School, home of the Cheesemakers. During the past two years, Jim has taken charge of programming both "Cheesemaker Chatter" and another show called "Teen Time."

"Big Jim," as he has become known on the radio, has a third class FCC license and is now studying hard to pass the qualifications for his first class license. He graduated from high school with a 3.34 grade point average and future plans include attending Clatsop Community College where he will major in communications technology. *(Norman Fairchild, Advisor)*

What's a Farm Like?

"Operation Little Farmer" took 61 underprivileged children in the Spokane, Washington, area to the farm.

FFA and FHA members from Cheney sponsored this second annual outing. Members rode the buses and helped supervise the children.

First stop was the Collier farm where the children played with chickens, rab-

These pigs were favorites but some of the children had never seen a horse.

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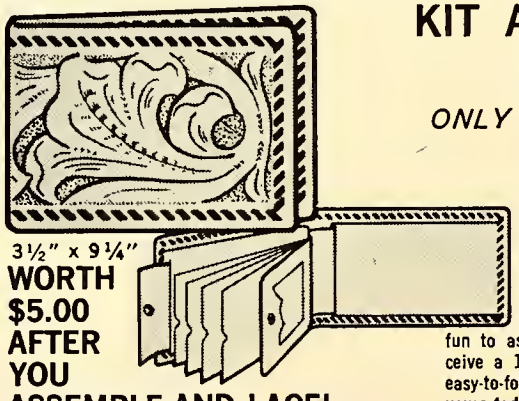

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bits, a goat, and a monkey. They especially liked a mother sow with her eight baby pigs.

Later at the Double R Riding Stables they rode horses and at the Elliott farm they played with sheep and a new baby calf.

The FHA prepared lunch at the school and FFA members helped serve the group. *(Jud Prescott, Reporter)*

FFA Members Honored

Ten FFA members were among 27 farm youth and foresters honored recently at the 32nd annual Farm Awards Luncheon in Louisville, Kentucky. The event is sponsored by *The Courier-Journal, The Louisville Times,* and WHAS, Inc. More than 250 farm, government, and business leaders of Kentucky and Indiana joined in the tribute.

The top FFA member recognized at the luncheon was Marvin Lee Wilson, Grand Rivers, Kentucky. A Freshman at Paducah Community College, Marvin already owns about a 30 percent interest in his family's 835-acre farm, which includes 160 head of beef cattle, 500 head of hogs, and 200 acres of corn.

Marvin schedules his school work to permit time for his farm chores. He plans to get a degree in agriculture from the University of Kentucky and continue farming with his father on a full-time basis.

Range Managers

The North Sevier Chapter at Salina, Utah, has 300 acres of range land leased from the United States Forest Service. They run about 50 head of cattle on it and about that many sheep.

The chapter holds an annual field day in September. Such things as cold branding and paint branding are demonstrated. Chapter members show the livestock and what they have been doing in the way of experimentation.

People in the community and nearby chapters are invited. The day ends with refreshments. One of the main benefits of this acreage of range land is that members get experience in fencing, range improvement, branding, vaccinating, and general work with sheep and cattle. *(E. Smith Peterson, Advisor)*

Like Father—Like Son!

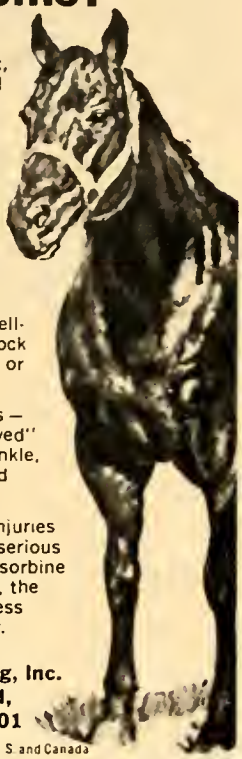
Four Troy, Pennsylvania, FFA members were awarded the Keystone State Farmer Degree and each of their fathers also received the Keystone Award as seniors at Troy High School.

Members and their fathers are Duane

(Continued on Page 36)

Keystone Farmer families, from left, are: Peters, Harkness, Cole, and Harris.

Does your horse have these symptoms?



1. Stiff-gaited walk, or refusal to stand on all four legs are general symptoms of lameness. Check horse over carefully.

2. Swelling and heat on front of foreleg from knee to ankle. It's called "bucked shins."

3. Soft, painless swelling around the fetlock is called "windgall" or "windpuff."

4. Swollen tendons — swelling gives a "bowed" look from knee to ankle, so it's called "bowed tendon."

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A "syndicate" composed of chapter officers baught their advisor at a slave auction in Audubon, Iowa. Officers say a number of tasks immediately came to mind.

FFA in Action

(Continued from Page 35)

and Walter Cole, Jr.; Neil and Robert Peters; Bradley and Dana Harkness; and Ronnie and Kenneth Harris.

Advisor Sam Davey said, "This sort of thing has happened before with one or two members whose fathers were also Keystone winners, but never four!"

Neil Peters owns one cow and is interested in dairy farming and conservation. His dad, Robert, is a 1939 graduate of Troy, owns 41 cows and milks 24.

Ronnie Harris has 4 cows, 5 heifers, and a bull. Besides the dairy business, he's interested in veterinary medicine. His father, Kenneth, is a 1949 graduate, owns 81 cows and milks 48.

Duane Cole owns 6 cows, 3 heifers, and 1 calf. Walter, his father, is a 1949 graduate, milks 47 of his 81 cows.

Bradley Harkness owns 6 cows, 2 heifers, and 3 calves. Bradley's father, Dana, owns 150 head of cattle and milks 75. *(Dennis Miller)*

Farmer-Businessman Night

Over 500 guests attended the first annual Farmer-Businessman Appreciation night sponsored by the Audubon, Iowa, FFA.

The chapter members prepared and served a roast pork supper for their guests. The chapter chose this way to express appreciation for the generous support their community has given the chapter over the years.

Members roasted three market hogs all day over a charcoal pit. Serving started at six and continued for two hours. The open house was for parents, special friends and other interested people in the community. Everyone got to eat all they wanted.

After the meal the 60 members were sold for eight hours of work—averaged $1.66 per hour. Some of the funds were contributed to an area children's fund. The rest was used by the chapter.

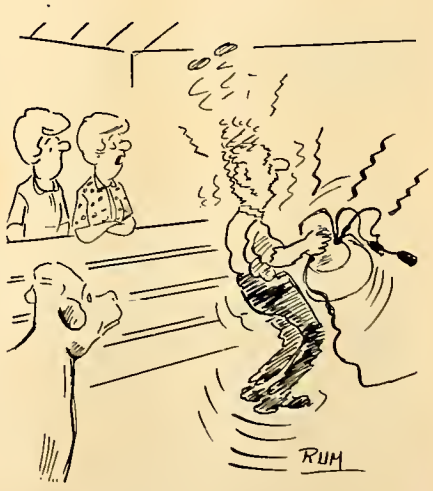
A "syndicate" of chapter officers paid $3.60 an hour for Chapter Advisor Franklin Albertsen. *(Steve Irlmeier, Reporter)*

To Practice Brotherhood

The Taft-Woodland Hills, California, FFA sponsored their annual "Help the American Indian" drive recently at the Taft Senior High School. The FFA offered a free barbecue to the class donating the most food by weight.

To help promote participation by their fellow students, the chapter had an Indian representative talk with students during a lunch period.

Over 2½ tons of canned goods were collected. The food plus several boxes of clothing and writing materials were taken to the Navaho Reservation in Painted Desert, Arizona. *(Stanley Merriett, Reporter)*

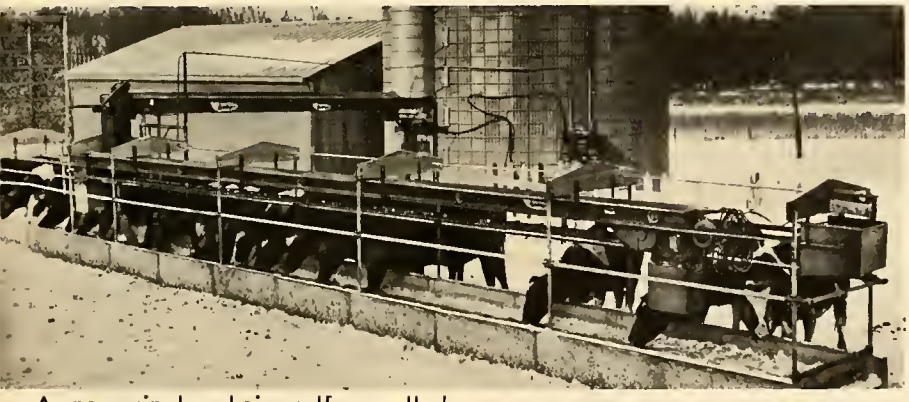


"Fred didn't have much get-up-and-go until . . ."

The New Holland Model 1880 Crop-Cruiser forage harvester can now be purchased with a V-8 diesel engine that generates 165 horsepower. Crop heads available include wide and narrow row corn heads, windrow pickup, and a 12-foot sicklebar attachment.

International Harvester has released the new International 990 mower conditioner. It is available in seven- and nine-foot widths with either a four, five, or six bat reel. The conditioner operates with less power and with less cutting adjustment.

Something New



A new single chain self-propelled bunk feeder and conveyor have been introduced by Badger Northland, Inc. The two pieces of equipment are "capacity-matched" to deliver an even flow of feed with low power. Equipment may be installed outdoors as here or inside a stanchion barn.

Mathews Company of Crystal Lake, Illinois, has built an electrically operated, gas fired dryer suited to smaller grain drying needs. The new Model 250 requires only five to ten electrical horsepower and has the capacity for drying 1,000 to 1,500 bushels of corn or grain per day.

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HAVE YOU HEARD THIS ONE

Teacher: *"Do you think paper can be used effectively to keep people warm?"*
Tom: *"I sure do. My last report card kept the family hot for a week!"*

Pam Knox
Wasco, California

Two little farm boys were passing a nudist colony when they noticed a hole in the fence. As kids will do, one went over to inspect the goings-on inside.
"Hey, there are a lot of people there."
"Men or women?" asked the other little boy.
"I don't know—they don't have clothes on!"

Tim Mills
Rochester, Indiana

A 5-year-old, after he had spent his first day in school, was asked how he liked kindergarten.
"I don't like to think of it as a kindergarten." he replied disdainfully. *"I like to think of it as an institution of lower learning."*

Harold Fair
Hurtsboro, Alabama

Jim: *"I was on TV yesterday."*
Bill: *"How did you get on TV?"*
Jim: *"I got up on a stool and sat on it."*

James Oliphant
Louise, Mississippi

Salesman: *"Is your mother home?"*
Little boy: *"Yes, sir."*
Salesman: (after knocking a while) *"I thought you said she was home."*
Boy: *"She is, but we don't live here."*

Tony Cooper
Mullins, South Carolina

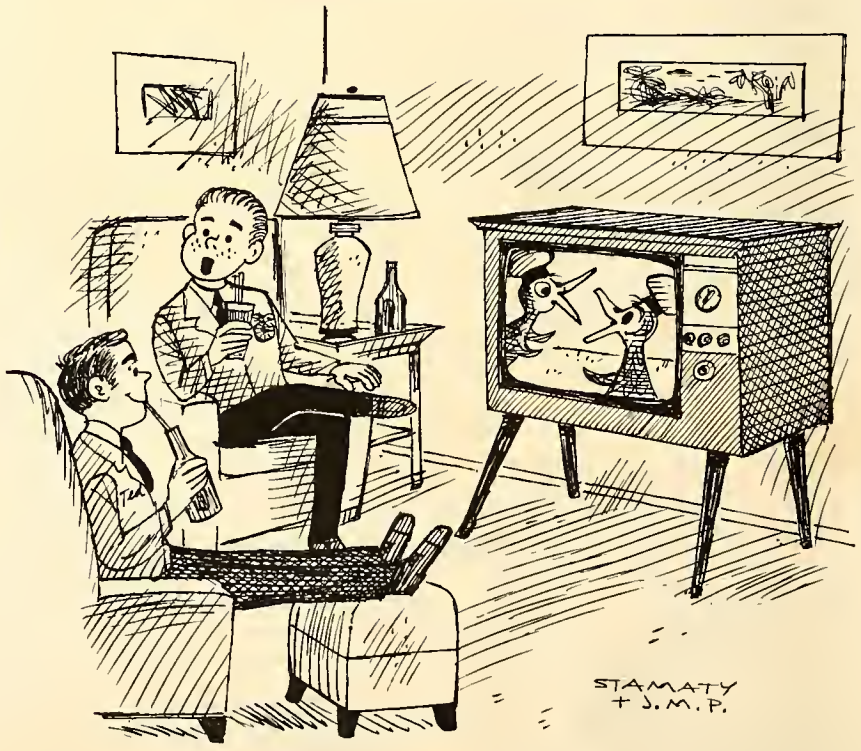
She: *"One round-trip ticket, please."*
Clerk: *"Where to?"*
She: *"Back here, of course."*

Dan Weiss
Bremen, Indiana

Question: What happens to little girls that eat bullets?
Answer: Their hair grows out in bangs.

Mary Ann Campbell
Halls, Tennessee

Charlie, the Greenhand



"Sometimes you just can't sit idly by and not get involved."

Question: Why was the baby ink spot crying?
Answer: Because his mother and father were in the pen and he didn't know how long the sentence would be.

Dianne Burr
Dunbar, Nebraska

Jeff: *"How do you remove varnish?"*
Joe: *"I take out the 'R' and make it vanish."*

Jeff Cox
Riceville, Tennessee

Sign in a self-service elevator: Ninth Floor Button Out Of Order. Please Push 6 and 3.

Calvin Harris, Jr.
Faber, Virginia

Albert: *"Why did the chicken cross the road?"*
Joe: *"To get away from Colonel Sanders."*

Carol Carson
Burnsville, West Virginia

Jim: *"Why did the private salute the refrigerator?"*
John: *"I don't know."*
Jim: *"Because it was General Electric."*

Edward Koenigsberg
Sheffield, Iowa

Question: How can you tell a quack doctor?
Answer: By the size of his bill.

Ralph Beier
Ferdinand, Indiana

That last joke was about as funny as a flood in an Alka-Seltzer factory.

David Duehn
Hector, Minnesota

Teacher: *"John, can you tell me where the Red Sea is?"*
John: *"Yes, ma'am, it's on the third line of my report card."*

Douglas Davis
Indian Trail, North Carolina

Question: Why is a baseball park cool?
Answer: There's a fan in every seat.

Julian Hayes
Champlain, Virginia

The National FUTURE FARMER *will pay $1.00 for each joke selected for publication on this page. Jokes may be submitted on post cards addressed to The National* FUTURE FARMER, *Alexandria, Virginia 22309. In case of duplication, payment will be made for the first one received. Contributions cannot be acknowledged or returned.*

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3

4

5

6

Boot style: 210-R-3 Tan Flambeau vamps with full scallop 13" treebark kid tops.

Photos: 1, 2 & 3: Dean Oliver, 4: Rex Allen, 5 & 6: Stanley Bush.

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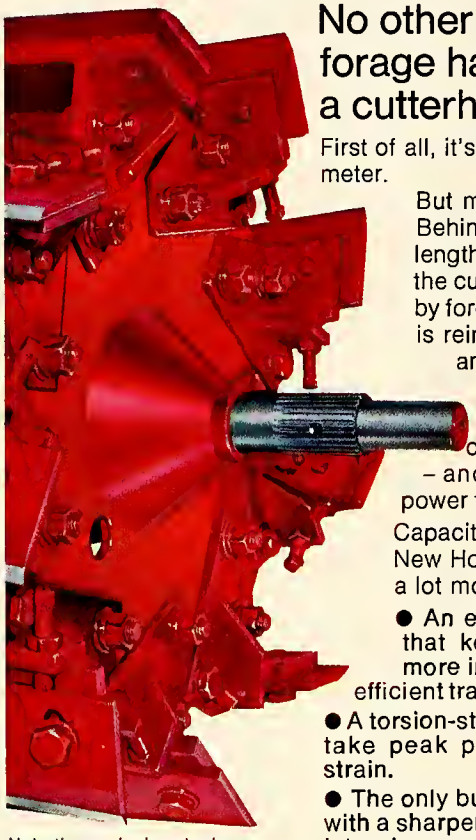

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- A torsion-steel PTO shaft that can take peak power loads without strain.
- The only built-in knife sharpener with a sharpening stone that moves into place automatically to assure true bevel edges.

It adds up to a hard-working machine. Whether you're chopping corn silage (with a 1-row, 2-row or 2-row narrow head) or haylage (with the Super-Sweep windrow pickup) or standing grass crops (with the sickle-bar attachment).

Also available: the extra-heavy-duty Model 880 and its SP version, the Model 1880 Crop-Cruiser® forage harvester. See your New Holland dealer.

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Super 717 Forage Harvester: Closely spaced teeth on the Super-Sweep pickup get the short crop ordinary pickups miss.

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